By Fritz

General Max

Shorter s. Kris Neville

Plaque of Pythons

a Frederik Pohl

the Space Station A Science Fact

> By Willy Ley





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ALL STORIES NEW

OFCEMBER, 1962 . VOL. 21, NO. 2

FORECAST

CONTENTS
NOVELLA THE CREATURE FROM CLEVELAND OEPTHS
by Fritz Leiber
GENERAL MAX SHORTER
by Kris Neville
SHORT STORIES OR. MORRIS GOLOPEPPER RETURNS
by Avram Davidson

OROOZLE by Frank Banta SOOOM & COMORRAH TEXAS 104 by R. A. Lafferty 112 THE GLORY OF IPPLING by Helen M. Urban

SERIAL - Conclusion PLACUE OF PYTHONS 136 by Frederik Pohl ARTICLE 78 PLUTO - GOORWAY TO THE STARS

by George Peterson Field SCIENCE DEPARTMENT FOR YOUR INFORMATION by Willy Lev FEATURES EDITOR'S PAGE

GALAXY'S FIVE STAR SHELF by Floyd C. Gale Cover by Decriber illustrating For Your Information Next issue (February) on sale December 10th.



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OPPORTUNITY KNOCKED

- But No One Was Home

OUPLE months back, in the earliest stages of Seattle's Century 21 World's Fair, the management took notice of the fact that when you speak of Century 21 you are automatically speaking of science fiction, whether you know it or not, and scheduled a panel discussion on the subject. The principal guests were Ray Bradbury and Rod Serling Since this was proposed as a full-scale kulturfest (admission \$2.75, nut on in a hall that seats 3,000 people) we thought it worth your while and ours to ask Our Man in Seattle, F. M. Busby, to attend and relay the information.

We did; he did; here is his report:

The panel was eventually anannounced as Science Fiction, Ghosts and Freud in Novels,

Television, Stage and Films in the Space Age. The moderator was Mr. William Kelley, West Coast editor for a book publishing firm. Mr. Kelley began by stating that he knew nothing about science fiction and did not know what he was doing here. The first panelist to be introduced was Mr. Lowell Hawley. Chief Writer for the Walt Disney Studios. Mr. Hawley began by stating that he knew nothing about science fiction and didn't know what he was doing here: that made two honest men so far. (At this point a muted chorus was heard from scattered points in the crowd: "What are we doing here?" No answer was forthcoming.) It must be said for Mr. Hawley that he gave lucid an-

swers concerning movies with

which he was familiar, and that

when he had nothing to say he

refrained from saying it. When asked a general question along the lines of, "What do you think the future will be like?" Mr. Hawley stated that in his opinion. "People in the future will still be interested in the same basic things, though perhaps from a new perspective" . . . a position hard to fault, and quite in keep-

ing with the motif of the occasion. Next came the meat course. Mr. Ray Bradbury is an excellent speaker and a provocative thinker, and he was by no means having an off day. First he stirred up the animals with: "I know the least science of any science-fiction writer and I'm proud of it." Tenyear-olds, he says, tell him: "You know that last story of yours? The way that spaceship in it works? UH-uh!" But, he says, he ien't about to rewrite for ten-

Then he got down to business. The space age, he said, is the single most important step ever taken by mankind. The next fifty years will change the pattern of our lives more than did the Renaissance The movement to snace is "a religious movement in the truest sense of the world . . . Man will pass the gift of life on to other planets, and so will

achieve continuity."

vear-olds!

Mr. Rod Serling, the final member of the panel, is a very personable young man who has a

warm way with an audience. He has not been around science fiction very long and is the first to admit it. After discouraging his hearers with a standard "science fiction today is science tomorrow" gambit, Mr. Serling won them back by telling Mr. Bradbury: "You wrote this stuff and developed it before it became popular. Johnny-come-latelies like me have a lot to thank you for." Further than that, Mr. Serling displayed a fine, friendly touch for audience empathy and a familiarity with the sciences fiction field comparable to Hugo Gernsback's. In fact, Mr. Serling's views of science fiction were very much in accord with those expressed by Mr. Gernsback over many years, with emphasis on prophecy, education and inspiration of the reader. He was gratified to be able to say that

namely inside his ribcage, where A FTER these opening remarks there was a sort of discussion among panelists and moderator. from which some (approximate! - taken by pencil in the dark) notes follow:

science fiction is at last becom-

ing "respectable." Cheers did not

drown him out, but his heart is

obviously in the right place . . .

it's rafe

Bradbury: The space age is only beginning. The distance to the sun is less than that from one ear to the other; this is what we

will always be exploring.

Serling: TV has not even scratched the surface.

Hawley: Do you write to en-

tertain— to educate — what's your purpose?

Mr. Serling allowed that contained the tertainment is a package deal, which can educate or have a colonit of view. ... or not. Mr. Bradhury cited Verne as inspiring inventions (submarine) and explorers (Admiral Byrd), and noted how space technology dead come to involve religious matters, ex. Pone Pius XII officially and come to involve religious matters.

proving space travel in 1956.

Bradbury: America is the most
blasphemous nation in all history.
We not only question the natural
order of things, we change it and
set it aside. . . I think that we are
direct extrusions of God, who
wants to perceive Himself
through us.

Moderator: What about censorship in science fiction?

Bradbury: You can get away with murder. Even in TV, with a purely science-fiction story you have very little interference. They don't know what you're talking

about.

Serling: Social commentary
can go into science fiction that
no one would dare to try straight.

is From the audience: Is manto kind prepared to go into space and meet nonhuman intelligences which might be housed in revolting shapes?

Bradbury: Humanity is a concept. It has nothing to do with

cept. It has nothing to do with appearance.

Kelley: We're not ready. Until

we get this world straightened up, why go anywhere? . . . We are sick. Take an example of one of our jokes: "I have this Father Damien doll. You wind it up and set it on the table — and it rote."

Bradbury: We are never ready. We go anyway, as soon as we are able.

With all due respect to Mr. Kelley and Mr. Hewbey, it is in-teresting to speculate what the results might have been if Mr. Bradbury had been placed on a panel (at \$2.75 a head admission!) composed exclusively of people who know what he was talking about. Mr. Serling showed up well for a self-admitted John-up come-lately . . . but considering all the West Coast talent that could have been available, the beard dring arene for the audience

heart drips green for the audience that expected four distinct and informed points of view of science fiction to be presented. Doubtless the producer was most sincere in feeting that a

most sincere in feeting that a Disney writer and a book editor would draw the "general public"



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into attendance to this crackpot "Science Fiction Panel" that he had somehow agreed to produce. They never seem to learn do they?

—F. M. BUSRY

WITH honorable, and rare. exceptions they never do. We agree to this with a certain amount of emotion. One of the peripheral duties of a writes and/or editor is making an occasional public appearance via TV. radio women's club or PTA We have often noted the emberrassed half-smile which is the standard expression on the face of the program chairman or program host who doesn't quite know what to say to or about these nuts who write this Buck Rogers stuff. You can see on his face what is passing through his mind: Obviously there must be something about what this fellow does that will interest at least some of the audience, but what in the world can it be? So let's play it safe. We'll ask the six standard questions and crack the six standard jokes . . . and by then maybe the pregram will be over.

The trouble with science fiction (as we have said here in other connections) is that too many of its manifestations are under the control of people who don't know anything about it. As aficanados know, it won't fit a mold especially not the Buck Rogers mold of disrays on Martian sea-

bottoms.

They never seem to learn, do they?

— THE EDITOR

* * * * * FORECAST

To begin 1963 we offer New You's Greekings to another stor-closs wardshift who has samehow evaded Galazy's sharphai sepada up to this time. The man's name is Brian W. Aldiss; the stary, a navellae entitled consistential entitle the same issue we have another navella, this area by Gordon R. Dickson – Home From the Share – and at least one naveltae. Conductive Sharth Share & Count From A. Bu starts, features, Willy Ley — a child-sized

8. Dickson – Home From the Share – and at I lead and envirolette, Cathwaiter Shaith's Thick Box, Count From Alm shorts, features, Willy Ley – a fall-sized portion of the best science fiction reading we can find.

Gare to look a little faithful enboard? Domon Kright returns in the fallowing have with a long complete story colled The Visitor of the Zon – fall of the Share of Share of

Here is a madern tale of on inner-directed sorcerer and on outer-directed sorcerer's apprentice . . . o tale of —

THUE

CREATURE

FROM

CLEVELAND DEPTHS

By FRITZ LEIBER Illustrated by WOOD

66 COME on, Gussy," Fay prodded quietly, "quit stalking around like a neurotic bear and suggest something for my invention team to work on. I enjoy visiting you and Daisy, but I can't stay aboveground all night."

can't stay aboveground all night."
"If being outside the shelters
makes you nervous, don't come
around any more," Gusterson
told him, continuing to stalk.
"Why doesn't your invention

team think of something to invent? Why don't you? Hahl" In it the "Hahl" lay triumphant condemnation of a whole way of life, "We do," Fay responded imperturbably, "but a fresh view-

point sometimes helps."
"Til say it does! Fay, you burglar, I'll bet you've got twenty people like myself you milk for free ideas. First you irritate their bark and then you make the rounds every so often to draw off the latex or the maple gloop." Fay smiled, "It ought to please

Fay smiled. "It ought to please you that society still has a use for you outre inner-directed types. It takes something to make a junior executive stay aboveground after dark, when the missiles are on the prow!"

"Society can't have much use for use or it'd pay us something." Gusterson sourly asserted, staring blankly at the tankless TV and kicking it lightly as he

pessed on.
"No, you're wrong about that,
Gussy, Money's not the key goad
with you inner-directeds. I got
that straight from our Motivations chief."

"Did he tell you what we should use instead to pay the grocer? A deep inner sense of achievement, maybe? Fay, why should I do any free thinking for Micro Systems?"

"I'll tell you why, Gussy. Simply because you get a kick out of insulting us with sardonic ideas. If we take one of them seriously, you think we're degrading ourselves, and that pleases you even more. Like making someone laugh at a lousy pun."

GUSTERSON held still in his roaming and grinned. "That the reason, huh? I suppose my suggestions would have to be something in the line of ui-

f tra-subminiaturized computers, where one sinister fine-etched e molecule does the work of three big humbling brain cells?"

"Not necessarily, Micro Systems is branching out, Wheel as free as a rogue star. But I'll pass along to Promotion your one molecule-three brain cell sparkler. It's a slight exaggeration, but it's catchy."

"I'll have my kids watch your ads to see if you use it and then I'll sue the whole underworld." Gusterson frowned as he resumed his stalking. He stared puzzledly at the antique TV. "How about inventing a plutonium termita?" he said suddenly. "It would get rid of those stockpiles that are worrying you moles to death."

he said suddenly. 'It would get rid of those stockpiles that are worrying you moles to death.''
Fay grimaced noncommittally and cocked his head.
"Well, then, how about a beauty mask? How about that, hey? I don't mean one to repair

ney? I don't meen due to repair a woman's complexion, but one she'd wear all the time that'd make her look like a 17-year-old sexpot. That'd end her worries." "Hey, that's for me," Daisy called from the kitchen. "I'll make Gusterson suffer. I'll make bin crawl around on his hands

him crawl around on his hands and knees begging my immature favors."
"No, you won't," Gusterson called back. "You having a face like that would scare the kids. Better cancel that one. Fay Haif



the adult race looking like Vina Videreson is too awful a thought."

"Yah, you're just scared of making a million dollars." Daisy icered.

"I sure am," Gusterson said solemnly, scanning the fuzzy floor from one murky glass wall to the other, hesitating at the TV. "How about something homey now, like a flock of little prickly cylinders that roll around the floor collecting lint and flub? They'd work by electricity, or at

a pinch cats could bat 'em around. Every so often they'd be automatically herded together and the lint cleaned off the bristles"

"No good," Fay said. "There's no lint underground and cats are verboten. And the aboveground market doesn't amount to more moneywise than the state of Southern Illinois Keep grander, Gussy, and more impractical - you can't sell people merely useful ideas." From his hassock in the center of the room he looked uneasily around, "Say, did that violet tone in the glass come from the high Cleveland hydrogen bomb or is it just age and ultraviolet, like desert glass?"

66NO, somebody's grandfather liked it that color." Gusterhomes in orbit around earth? son informed him with happy bitterness. "I like it too - the

glass, I mean, not the tint. People who live in class houses can see the stars - especially when there's a window-washing streak in their germ-plasm."

"Gussy, why don't you move underground?" Fay asked, his note. "It's a lot easier living in one room, believe me. You don't have to tramp from room to room

bunting things," "I like the exercise," Gusterson said stoutly.

"But I bet Daisy'd prefer it underground. And your kids wouldn't have to explain why their father lives like a Red Indisn. Not to mention the safety factor and insurance savings and a crypt church within easy slidewalk distance Incidentally, we see the stars all the time, better

than you do - by repeater." "Stars by repeater," Gusterson murmured to the ceiling, pausing for God to comment. Then, "No. Fay, even if I could afford it and stand it - I'm such a bad-luck Harry that just when I got us all safely stowed at the N minus 1 sublevel, the Soviets would discover an earthquake bomb that struck from below, and I'd have to follow everybody back to the treetons. Hey! How about bubble

Micro Systems could subdivide the world's most spacious suburb 12 GALAXY and all you moles could go ellipsing. Space is as safe as there is: no air, no shock waves. Free fall's the ultimate in restfulness great health benefits. Commute by rocket - or better yet stay home and do all your business by TV-telephone, or by waldo if it were that sort of thing. Even pet your girl by remote control she in her bubble, you in yours, whizzing through vacuum, Oh, demn - demn - damn - damn -

DAMN!" He was glaring at the blank screen of the TV, his big hands clenching and unclenching.

*Don't let Fay give you apoplexy-he's not worth it." Daisy said, sticking her trim head in from the kitchen, while Fay inquired anxiously, "Gussy, what's

the matter?" "Nothing, you worm!" Gusterson roared, "Except that an hour ago I forgot to tune in on the only TV program I've wanted to hear this year - Finnedans Wake

scored for English, Gaelic and brogue, Oh, damn-damn-DAMN!" "Too bad," Fay said lightly. "I didn't know they were releasing it on flat TV too"

66WELL, they were! Some to keep completely underground. And I had to forget! I'm always doing it - I miss everything Look here, you rat," he blatted suddenly at Fay, shaking his finger under the latter's chin. "I'll tell you what you can have that ignorant team of yours invent. They can fix me up a mechanical secretary that I can feed orders into and that'll remind me when the exact moment comes to listen to TV or phone somebody or mail in a story or write a letter or pick up a magazine or look at an eclipse or a new orbiting station or fetch the kids from school or buy Daisy a bunch of flowers or whatever it is. It's got to be something that's always with me. not something I have to go and consult or that I can get sick of and put down somewhere. And it's got to remind me forcibly enough so that I take notice and

what your stupid team can invent for me! If they do a good job, I'll pay 'em as much as fifty dollars!" "That doesn't sound like anything so very original to me," Fay commented coolly, leaning back from the wagging finger. "I think all senior executives have something of that sort. At least, their secretary keeps some kind of

don't just shrug it aside, like I

sometimes do even when Daisy

reminds me of things. That's

"I'm not looking for something with spiked falsies and nylons up to the neck," interjected Gusterson, whose ideas about secretaries

file !

mech reminder — that's all!"

"Well, I'll keep the idea in
mind," Psy assured him, "along
with the bubble homes and beauty masks. If we ever develpo apything along those lines, I'll the sevent devellet you know. If it's a beauty
mask, I'll bring Doisy a pilott
mask, I'll bring Doisy a pilott
kids." He put his watch to his
to cut to make it underground before the maint doors close. Just
the minutes to Second Curfeet

By, Gus. 'By, Daze."

Two minutes later, living room lights out, they watched Fay's foreshortened antilke figure scurrying across the balding ill-lit

tor.

Gusterson said, "Weird to think of that big bright space-poor glamor basement stretching around everywhere underneath. Did you remind Smitty to put a new bulb in the elevator?"

"The Smiths moved out this morning." Daisy said tonelessly. "They went underneath." "Like cockroaches," Gusterson

said. "Cockroaches leavin' a sinkin' apartment building. Next the ghosts'il be retreatin' to the

shelters."

"Anyhow, from now on we're our own janitors," Daisy said.

He nodded. "Just leaves three families besides us loyal to this class death trap. Not countin' ghosts." He sighed. Then, "You like to move below, Daisy?" he asked softly, putting his arm lightly across her shoulders. "Get a woozy eyeful of the bright lights and all for a change? Be a rat for a while? Maybe we're getting too old to be bats. I could scrope me a company job and have a thinking closet all to myself and the control of the country of the tweet because the country of the you and a lot cleaner. And you'd

sleep safer."
"That's true," she answered and paused. She ran her fingertip slowly across the murky glass, its violet tint barely perceptible against a cold dim light across the park. "But somehow," she said, snaking her arm around his waist, "I don't think I'd sleep honoier — or one hit excited."

11

THREE weeks later Fay, dropping in again, handed to Daisy the larger of the two rather small packages he was carrying.

packages ne was carrying
"It's a so-called beauty mask,"
he toki her, "complete with wig,
eyolashes, and wettable velvet
lips. It even breathes — pinholed
elastiskin with a static adherencecharge. But Micro Systems had
nothing to do with it, thank God,
Beauty Trix put it on the market
ten days aso and it's already

started a teen-age craze. Some

boys are wearing them too, and the police are yipping at Trix for encouraging transvestism with psychic repercussions."

"Didn't I hear somewhere that Trix is a secret subsidiary of Micro?" Gusterson demanded, rearing up from his ancient electric typewriter. "No, you're not stopping me writing, Fay — it's the gut of evening. If I do any more I won't have any juice to other of my insanity thrillers other of my insanity thrillers moving, A real id-teaser. In this one not only all the characters are crary but the robot psychia-

are crazy but the robot psychiatrist too."

"The vending machines are jumping with insanity novels,"
Fay commented. "Odd they're so

popular."
Gusterson chortled. "The only way you outer-directed moles will accept individuality any more even in a fictional character, without your superegos getting seasick, is for them to be

ter, without your superegos getting seasick, is for them to be crazy. Hey, Daisy! Lemme see that beauty mask!"

But his wife, backing out of the room, hugged the package to her bosom and solemniv shook

her head.

"A hell of a thing," Gusterson complained, "not even to be able to see what my stolen ideas look like."

"I got a present for you too," Fay said. "Something you might

think of as a royalty on all the inventions someone thought of a little ahead of you. Fifty dollars by your own evaluation." He held out the smaller nackage. "Your

tickler."

"My what?" Gusterson demanded suspiciously.

"Your tickler. The mech reminder you wanted. It turns out that the file a secretary keeps to remind her boss to do certain things at certain times is called a tickler file. So we named this a tickler. Here." Gusterson still didn't touch the

package. "You mean you actually put your invention team to work on that nonsense?"

on that nonsense?"

"Well, what do you think?

Don't be scared of it. Here, I'll show you."

As he unwrapped the peckage, Fay said, "It hasn't been decided yet whether we'll manufacture it commercially. If we do, I'll put through a voucher for you — for development consultation" or something like that. Sorry no royaity's possible. Davidson's squad had started to work by the identical idea three years ago, but it possible that the consultance of the started to work of the consultance of the started to work of the consultance of the consultance of the consultance of the consultance of the started to work of the consultance of the consultance of the started of the consultance of the consultance of the consultance of the started of the consultance of the consul

ON THE scarred black tabletop was a dully gleaming silvery object about the size and shape of a cupped hand with fingers merging. A tiny pellet on a short near-invisible wire led off from it. On the back was a purctured area suggesting the face of a microphone; there was also a window with a date and time in hours and minutes showing through and next to that four little buttons in a row. The concave underside of the silvery "hand" was smooth except for a live two little rollers came

through.

"It goes on your shoulder under your shirt." Fay explained. "and you tuck the pellet in your ear. We might work up bone conduction on a commercial model. Incide is an ultra-clow fine-wire recorder holding a spool that runs for a week. The clock lets you go to any place on the 7-day wire and record a message. The buttons give you variable speed in going there, so you don't waste too much time making a setting. There's a knack in fingering them efficiently, but it's easily acquired."

Fay picked up the tickler, "For instance, suppose there's a TV show you want to catch tomorrow night at twenty-two hundred." He touched the buttons of the clock face blurred briefly three times before showing the setting he'd mentioned. Then Fay socks list the number of respectively.

"Turn on TV Channel Two you big dummy!" He grinned over at Gusterson. "When you've got all your instructions to yourself loaded in you synchronize with the present moment and let her roll. Fit it on your shoulder and forget it. Oh. yes, and it literally does tickle you every time it delivers an instruction. That's what the little rollers are for Believe me, you can't ignore it. Come on. Gussy, take off your shirt and try it out. We'll feed in some instructions for the past ten minutes so you get the feel of how it works."

"I don't want to," Gusterson said. "Not right now. I want to smill around it first. My God, it's small! Besides everything else it does, does it think?" "Don't pretend to be an idiot, Gussyl You know very well that

quite this small can possibly have enough elements to do any thinking."

Gusterson shrugged. "I don't know about that I think bugs think."

FAY groaned faintly. "Bugs operate by instinct, Gussy," he said. "A patterned routine. They do not scan situations and consequences and then make decisions."

"I don't expect bugs to make decisions," Gusterson said. "For that matter I don't like people who go around alla time making decisions."

"Well, you can take it from me, Gussy, that this tickler is just a miniaturized wire recorder and clock . . and a tickler. It doesn't do anything else."

"Not yet, maybe," Gusterson said darkly. "Not this model Fay, I'm serious about bugs thinking. Or if they don't exactly think, they feel. They've got an interior drama. An inner glow. They're conscious. For that matter, Fay, I think all your really complex electronic computers are conscious ton."

"Quit kidding, Gussy."

"Who's kidding?"
"You are. Computers simply

aren't alive

"What's alive? A word. I think computers are conscious, at least while they're operating. They've got that inner glow of awareness. They sort of . . . well . . . meditate."

"Gussy, computers haven't got any circuits for meditating. They're not programmed for mystical lucubrations. They've just got circuits for solving the problems they're on."

"Okay, you admit they've got problem-solving circuits — like a man has. I say if they've got the equipment for being conscious, they're conscious. What has

wings, flies."
"Including stuffed owls and

g gilt eagles and dodoes — and wood-burning airplanes?"

"Maybe, under some circumstances. There was a wood-burning airplane. Fay," Gusterson continued, wagging his wrists for emphasis, "I really think computers are conscious. They just don't have any way of telling us that they are. Or maybe they don't have any reason to tell us. like

the little Scotch boy who didn't say a word until he was fifteen and was supposed to be deaf and dumb."
"Why didn't he say a word?"
"Because he'd never had any-

thing to say. Or take those Hindu fakirs, Fay, who sit still and don't say a word for thirty years or until their fingernals grow to the next village. If Hindu fakirs can do that. computers can!"

Looking as if he were masticating a lemon, Fay asked quietly, "Gussy, did you say you're working on an insanity novel?"

GUSTERSON frowned fiercely.
"Now you're kidding," he accused Fay. "The dirty kind of kidding, too."

"I'm sorry," Fay said with light t contrition. "Well, now you've sniffed at it, how about trying on Tickler?" He picked up the gleaming blunted crescent and jogged it temptingly under Gusterson's chin.

"Why should I?" Gusterson

asked, stepping back, "Fay, I'm up to my ears writing a book. The last thing I want is something interrupting me to make me listen to a lot of junk and do a lot of

useless things" "But, dammit, Gussy! It was all your idea in the first place!" Fay blatted. Then, catching him-

self, he added, "I mean, you were one of the first people to think of this particular sort of instrument." "Maybe so, but I've done some more thinking since then." Gusterson's voice grew a trifle solemn. "Inner-directed worthwhile thinkin'. Fay, when a man forgets to

do something, it's because he really doesn't want to do it or because he's all roiled up down in his unconscious. He ought to take it as a danger signal and investigate the roiling, not hire himself a human or mech reminder." "Bushwa," Fay retorted. "In

that case you shouldn't write memorandums or even take notes."

"Maybe I shouldn't," Gusterson agreed lamely, "Td have to

think that over too." "Ha!" Fay jeered, "No. I'll tell you what your trouble is, Gussy, You're simply scared of this contraption, You've loaded your skull with horror-story nonsense about machines sprouting minds and taking over the world - until you're even scared of a simple

ministurized and clocked recorder." He thrust it out. "Maybe I am," Gusterson admitted, controlling a flinch. "Honestly. Fay, that thing's got a

cleam in its eye as if it had ideas of its own. Nasty ideas." "Gussy, you nut, it hasn't dot

an eve." "Not now, no, but it's got the

gleam - the eye may come. It's the Chesire cat in reverse. If you'd step over here and look at vourself holding it, you could see what I mean. But I don't think computers sprout minds, Fav. I just think they've got minds, because they've got the mind ele-

ments" "Ho, ho!" Fay mocked. "Everything that has a material side has a mental side," he chanted. "Everything that's a body is also a spirit, Gussy, that dubious old metaphysical dualism went out centuries ago."

"Maybe so," Gusterson said, "but we still haven't anything but that dubious dualism to explain the human mind, have we? It's a ielly of nerve cells and it's a vision of the cosmos. If that isn't dualism, what is?"

"I give up. Gussy, are you going to try out this tickler?"

"No!" "But dammit, Gussy, we made it just for you! - practically." "Sorry, but I'm not coming

near the thing."

"'Zen come near me." a husky voice intoned behind them. "Tonight I vant a man."

CTANDING in the door was something slim in a short silver sheath. It had golden bangs and the haughtiest snuh-nosed face in the world. It shank toward

"My God. Vina Vidersson!" Gusterson velled.

"Daisy, that's terrific," Fay anplauded, going up to her. She bumped him aside with a

swing of her hips, continuing to advance, "Not you. Ratty," she said throatily. "I vant a real man " "Fay, I suggested Vina Vidars-

son's face for the beauty mask." Gusterson said, walking around his Wife and shaking a finner "Don't tell me Triv just hannened to think of that too!

"What else could they think of?" Fay laughed. "This season sex means VV and nobody else." An odd little grin flicked his line a tic traveled up his face and his hody twitched slightly. "Say, folks. I'm going to have to be leaving It's exactly fifteen minutes to Second Curfey, Last time I had to run and I got heartburn. When are you people going to move downstairs? I'll leave Tickler. Gussy. Play around with it and get used to it. 'By now." "Hey, Fay," Gusterson called

curiously, "have you developed

absolute time sense?" Fay grinned a big grin from

the doorway - almost too big a grin for so small a man. "I didn't need to." he said softly, patting his right shoulder. "My tickler

told me He closed the door behind him. As side-by-side they watched

him strut sedately across the murky chilly-looking park, Gusterson mused, "So the little devil had one of those nonsense-gadgets on all the time and I never noticed Can you heat that?" Something draw across the violet-tinged store a short bright line that quickly faded "What's that?" Gusterson asked gloomily "Next to last stage of missile-here?"

fashioned shooting star?" Daisy asked softly. The (wettable) velvet lips of the mask made even her natural voice sound different She reached a hand back of her neck to pull the thing off. "Hey, don't do that." Gusterson protested in a hurt voice.

"Won't you settle for an old-

"Not for a while anyway." "Hokay!" she said harshly, turning on him, "Zen down on your knees, dog!"

T WAS a fortnight and Gusterson was loping down the home stretch on his 40,000-word in-

THE CREATURE FROM CLEVELAND DEPTHS

sanity novel before Fay dropped in again, this time promptly at

high noon.

Normally Fay cringed his shoulders a trifle and was inclined to slither, but now he strode aggressively, his legs scissoring in a fast, low goouestep. He whipped off the sunglasses that all moles wore topside by day and began to pound Gusterson on the back while calling boister.

ously, "How are you, Gussy Old Boy, Old Boy?"

Daisy came in from the kitchen to see why Gusterson was choking. She was instantly grabbed and violently bussed to the accompaniment of, "Hiya, Gorgeous! Yum-yum! How about adlibbing that some weekend?" She stared at Fay dazedly,

rasping the back of her hand across her mouth, while Gusterson yelled, "Quit that! What's got into you, Fay? Have they transferred you out of R & D to Company Morale? Do they line up all the secretaries at roll call and make you give them an eighthour energizing kiss?"

"Ha, wouldn't you like to know? Fay retorted. He grinned, twitched jumpingly, held still a moment, then hustled over to the far wall. "Look out there," be rapped, pointing through the violet glass at a gap between the two nearest old skyscraper apartments. "In thirty seconds you'll

see them test the new needle bomb at the other end of Lake Erie. It's educational." He began to count off seconds, vigorously semaphoring his arm. "... Two ... three ... Gussy, Two put through a voucher for two yards for you. Budgeting squawked, but I pressured "em."

Daisy squealed, "Yards! — are those dollar thousands?" while Gusterson was asking, "Then you're marketing the tickler?"

Gusterson was asking, "Then you're marketing the tickler?" "Yes. Yes," Fay replied to them in turn. ". . . Nine . . .

them in turn. Nine ten ... "Again he grinned and twitched, "Time for noon Comstaff," he announced staccato. "Pardon the hush box." He whipped a pancake phone from under his coat, clapped it over his face and spoke fiercely but inductive the state of th

thirty... Thar she blows!"

An incandescent streak shot up
the sky from a little above the
far horizon and a doubly dazzling
point of light appeared just above
the top of it, with the effect of
God dotting an "i".

"Ha, that'll skewer espionage satellites like swatting flies!" Fay proclaimed as the portent faded. "Bracing! Gussy, where's your tickler? I've got a new spool for it that'll razzle-dazzle you."
"I'll bet," Gusteryon said drily.

"Daisy?"

"You gave it to the kids and they got to fooling with it and broke it."

"No matter," Fay told them with a large sidewise sweep of his hand. "Better you wait for the new model. It's a six-way im-

provement."

"So I gather," Gusterson said,
eyeing him speculatively. "Does
it automatically inject you with
cocaine? A fix every hour on the

"Ha-ha, joke, Gussy, it achieves the same effect without using any dope at all. Listen: a tickler reminds you of your duties and opportunities — your chances for happiness and success! What's the obvious next step?"

HROW it out the window.
By the way, how do you do
that when you're underground?"

max when you're underground:

"We have hi-speed garbage boosts. The obvious next step is not only the property of the property

pipes this second plus ten you'll enjoy the hell out of yourself! Grab a ticket to ecstacy!" "My God," Gusterson gasped, "are those the kind of jolts it's giving you now?" "Don't you get it, Gussy? You never load your tickler except when you're feeling buoyantily enthusiatic. You don't just enthusiatic. You don't just ly yourself what to do hour by hour next week, you sell yourself or it. That way you not only make doubly sure you'll obey instructions but you constantly reinoculate yourself with your own enthusiasm."
"Can't stand mwelf when I'm

"I feel ashamed for hours afterwards."

"You're warped — all this

"You're wisped — an this lonely skylife. What's more, Gussy, think how still more persuasive some of those instructions would be if they came to a man in his best gift's most bedroomy voice, or his decrof's or psycher's Vina. Vidacend District, or you have, don't weer that beauty make outside. If a grand mis-demeanor ever since ten thousand ten-ager rioted through Tunnel-Mart wearing them. And VYR suight TiXE.

VV's sueing Trix."

"No chance of that," Daisy said.
"Gusterson got excited and bit
off the nose." She pinched her
own delicately.

"I'd no more obey my enthusiastic self," Gusterson was brooding, "than I'd obey a Napoleon drunk on his own brandy or a hopped-up St. Francis, Reinoculated with my own enthusiasm? I'd die just like from snake-bite!" "Warped, I said." Fay dogmatized, stamping around, "Gussy, having the instructions persuasive instead of neutral turned out to be only the opening wedge. The next step wasn't so obvious, but I saw it. Using subliminal

verbal stimuli in his tickler, a man can be given constant supportive euphoric therapy 24 hours a day! And it makes use of all that empty wire. We've revived the ideas of a pioneer dvnamic psycher named Dr. Coué. For instance, right now my tickler is saving to me - in tones too soft to reach my conscious mindbut do they stab into the unconscious! - Day by day in every way I'm getting sharper and sharper.' It alternates that with 'gutsier and gutsier' and . . . well. forget that. Coue mostly used 'better and better' but that seems too general. And every hundredth time it says them out loud and the tickler give me a brush - just a faint cootch - to make sure I'm keeping in touch,"

"That third word-pair," Daisy wondered, feeling her mouth reminiscently. "Could I guess?"

GUSTERSON'S eyes had been growing wider and wider. "Fay," he said, "I could no more use my mind for anything if I knew all that was going on in my inner car than if I were being brushed down with brooms by three witches Look here," he said with loud authority, "you got to stop all this - it's crazy. Fay, if Micro'll junk the tickler, I'll think you up something else to invent - something real good." "Your inventing days are

over." Fay brilled gleefully. "I mean, you'll never equal your masterpiece."

"How about," Gusterson bellowed, "an anti-individual guided missile? The physicists have got small-scale antigravity good enough to float and fiv something the size of a hand grenade. I can smell that even though it's a back-of-the-safe military secret. Well, how about keying such a missile to a man's finger-prints or brainwayes maybe or his unique smell! - so it can spot and follow him around the target in on him, without harming anyone else? Long-distance assassination - and the stinkingest gets it! Or you could simply load it with some disgusting goo and key it to teen-agers as a group that'd take care of them. Fav. doesn't it give you a rich warm

gelic bumblebees?" "You're not luring me down any side trails," Fay said laugh-

kick to think of my midget missiles buzzing around in your tun-

nels, seeking out evil-doers, like

then hurried toward the opposite wall, motioning them to follow-Outside, about a hundred yards beyond the purple glass, rose an-other ancient glass-walled apartment skyscraper. Beyond, Lake

Erie rippled glintingly. "Another bomb-test?" Guster-

son asked

Fay pointed at the building. "Tomorrow," he announced, "a modern factory, devoted solely to the manufacture of ticklers, will

be erected on that site! "You mean one of those win-

dowless phallic eyesores?" Gusterson demanded, "Fay, you people aren't even consistent. You've got all your homes underground Why not your factories?"

"Sh! Not enough room, And night missiles are scarier." "I know that building's been empty for a year," Daisy said un-

easily, "but how - ?" "Sh! Watch! Now!"

The looming building seemed to blur or fuzz for a moment Then it was as if the lake's bright ripples had invaded the old glass a hundred vards away. Wavelets chased themselves up and down the gleaming walls, became higher, higher . . . and then suddenly the glass cracked all over to tiny fragments and fell away, to be followed quickly by fragmented concrete and plastic and plastic piping, until all that was left was the mide steel framework vibrating so rapidly as to be almost invisible against the eleaming take

DAISY COVERED her ears, but there was no explosion, only a long-drawn-out low crash as the fragments hit twenty floors below and dust whooshed out

sideways

"Spectacular!" Fay summed up, "Knew you'd enjoy it. That little trick was first conceived by the great Tesla during his last fruity years, Research discovered it in his biog - we just made the dream come true. A tiny resonance device you could carry in your belt-bag attunes itself to the natural harmonic of a structure and then increases amplitude by tiny pushes exactly in time. Just like soldiers marching in step can break down a bridge, only this is as if it were being done by one marching aut." He pointed at the naked framework appearing out of its own blur and said, "We'll be able to hang the factory on that. If not, we'll whip a megacurrent through it and vaporize

it No question the micro-resona-

tor is the neatest sweetest wreck-

ing device going. You can expect

ciency now that mankind has the

tickler to enable him to use his

full potential. What's the matter.

23

folles?" Daisy was staring around the violet-walled room with dumb mistrust. Her hands were trembling.

"You don't have to worry." Fay assured her with an understanding laugh. "This building's safe for a month more at least." Suddenly he grimaced and leaped a foot in the sir. He raised a clawed hand to scratch his shoulder but managed to check the movement. "Got to beat it, folks," he announced tersely, "My tickler save me the grand to the stranger of the stranger

contch. "Don't go vet," Gusterson called, rousing himself with a shudder which he immediately explained: "I just had the illusion that if I shook myself all my flesh and guts would fall off my shimmving skeleton. Brr! Fay, before you and Micro go off half cocked. I want you to know there's one insuperable objection to the tickler as a mass-market item. The average man or woman won't go to the considerable time and trouble it must take to load a tickler. He simply hasn't got the compulsive orderliness and

willingness to plan that it requires."
"We thought of that weeks ago." Fay rapped, his hand on the door. "Every tickler spool that goes to market is patterned like wallpaper with one of five designs of suitable subliminal supportive euphoric material. 'Ittier and ittier.' viriler and viriler'.

you know. The buyer is robotinterviewed for an hour his personalized daily routine laid out and thereafter templated on his weekly spool. He's strongly urged next to take his tickler to his doctor and psycher for further instruction-imposition. We've been working with the medical profession from the start. They love the tickler because it'll remind people to take their medicine on the dot . . . and rest and eat and go to sleep just when and how doc says. This is a big operation, Gussy-a bililing operation! 'By!"

Daisy hurried to the wall to watch him cross the park. Deep down she was a wee bit worried that he might linger to attach a micro-resonator to this building and she wanted to time him. But Gusterson settled down to his typewriter and began to bet away.

"I want to have another novel started," he explained to her, "before the ant marches across this building in about four and a half weeks . . . or a million sharp little gutsy guys come swarming out of the ground and heave it into Lake Eris"

IV

EARLY NEXT morning windowless walls began to crawl up the stripped skyscraper between them and the lake, Daisy pulled the black-out curtains on that ride. For a day or two longer their thoughts and conversations were haunted by Gusterson's vague sardonic visions of a horde ing up out of the tunnels to tear down the remaining trees, tank the atmosphere and perhaps somehow dismantle the stars -

at least on this side of the world - but then they both settled back into their customary easygoing routines. Gusterson typed. Daisy made her daily shopping trip to a little topside daytime store and started painting a mural on the floor of the empty apartment pext theirs but one.

bors," she suggested once, "I need somebody to hold my brushes and admire. How about you making a trip below at the cocktail hours Gusterson and nicking un a couple of girls for a starter? Flash the old viriler charm. cootch them up a bit, emphasize the delights of high living, but make sure they're compatible roommates. You could pick up that two-yard check from Micro at the same time,"

"We ought to lasso some neigh-

"You're an immoral moneyravenous wench." Gusterson said absently, trying to dream of an insanity beyond insanity that would make his next novel a real id-rousing best-yender. "If that's your vision of me.

you shouldn't have chewed up

the VV mask" "I'd really prefer you with green stripes," he told her. "But

stripes spots or sun-bathing. you're better than those cocktail moles" Actually both of them acutely

disliked going below. They much preferred to perch in their eyrie and watch the people of Cleveland Depths, as they privately called the local sub-suburb, rush up out of the shelters at dawn to work in the concrete fields and windowless factories, make their daytime jet trips and freeway iaunts, do their noon-hour and coffee-break querrilla practice and then so scurrying back at twilight to the atomic-proofbrightly lit yestly exciting claustrophobic caves Fay and his projects began

once more to seem dreamlike. though Gusterson did run across a cryptic advertisement for ticklers in The Manchester Guardian, which he got daily by facsimile. Their three children reported similar ads, of no interest to young fry, on the TV and one afternoon they came home with the startling news that the monitors at their subsurface school had been issued ticklers. On sharp interrogation by Gusterson, however, it appeared that there last were not ticklers but merely two-way radios linked to

25



the school police station transmitter.
"Which is had enough." Gus-

terson commented later to Daisy. "But it'd be even dirtier to think of those clock-watching superegos being strapped to kids' shoulders. Can you imagine Huck Finn with a tickler, tellin' him when to tie up the raft to a towhead and when to take a swim?"

"I bet Fay could," Daisy countered. "When's he going to bring you that check, anyhow? Iago wants a jetcycle and I promised Imogene a Vina Kit and then Claudius'il have to have something." Gusterson scowled thought-fully, "You know, Daze," he said,

"I got a feeling Fay's in the hospital, all narcotized up and being fed intravenously. The way he was jumping around last time, that tickler was going to cootch him to vieces in a week."

A S IF TO refute this intuition.
Fay turned up that very evening. The lights were dim. Something had gone wrong with the building's old transformer and pending repairs, the two remaining occupied apartments were making do with batteries, which turned bright globes to mysterious amber candles and made Gusterson's ancient type-writer operates luzgishly.

Fay's manner was subdued or



for a moment Gusterson thought he'd shed his tickler. Then the little man came out of the shadows and Gusterson saw the large bulge on his right shoulder.

ows and custoring we the large book and custoring was the support of the same of the same

bine Tickler with Moodmaster,"
"My God," Gusterson interjected, "do they have a machine
now that does that?"
"Of course. They've been using

them on ex-mental patients for years."

"I just don't keep up with

progress," Gusterson said, shaking his head bleakly. "I'm falling behind on all fronts."

"You ought to have your tick-

ler remind you to read Science Service releases." Fay told him. "Or simply instruct it to scan the releases and — no, that's still in research." He looked at Gusterson's shoulder and his eyes widened. "You're not wearing the

27

new-model tickler I sent you,"

"I never got it," Gusterson asured him. "Postmen deliver top-side mail and parcels by throwing them on the high-speed garbage boosts and hoping a tornado will blow them to the right addresses." Then he added helpfully. "Maybe the Russians stole is while it was ridine the whirl.

winds."

"Starts not a suitable topic for string." Fay frowned. "We're hoping that Tickler will mobilize the full potential of the Free World for the first time in history. Gusterson, you are going to have to wear a ticky-tick. It's becoming impossible for a man to set through modern life without

one " "Maybe I will." Gusterson said appeasingly, "but right now tell me about Moodmaster. I want to put it in my new insanity novel." Fay shook his head, "Your readers will just think you're behind the times. If you use it, underplay it. But anyhow, Moodmaster is a simple physiotherapy engine that monitors bloodstream chemicals and body electricity. It ties directly into the bloodstream, keeping blood, sugar, et cetera, at optimum levels and injecting euphrin or depressin as necessary - and occasionally a touch of extra adrenaline, as dur-

ing work emergencies."

"Is it painful?" Daisy called from the bedroom.

"Excruciating," Gusterson called back. "Excuse it, please," he grinned at Fay. "Hey, didn't I suggest cocaine injections last

time I saw you?"
"So you did," Fay agreed flatly, "Oh by the way, Gussy, here's that check for a yard I promised you. Micro doesn't muzzle the

"Hooray!" Daisy cheered faint-

ly.

66 THOUGHT you said it was

going to be for two." Gusterson complained.
"Budgeting always forces a last-minute compromise," Fay shruezed. "You have to learn to

accept those things."
"I love accepting money and I'm glad any time for three feet," Daisy called agreeably. "Six feet might make me wonder if I weren't an insect, but getting a yard just makes me feel like a canester's moli."

"Want to come out and gloat y over the yard paper, Toots, and stuff it in your diamond-embroidtered net stocking top?" Guster-

"No, I'm doing something to that portion of me just now. But hang onto the yard, Gusterson." "Aye-aye, Cap'n," he assured her. Then, turning back to Fay.

"So you've taken the Dr. Coué

repeating out of the tickler?"
"Oh, no. Just balanced it off
with depressin. The subliminals
are still a prime sales-point. All
the tickler features are cumulative, Gussy. You're still underestimating the scope of the de-

vice."
"I guess I am. What's this
"Vavok-emergencies' business? If
you're using the tickler to inject
drugs into workers to keep them
going, that's really just my cocaine suggestion modernized and
I'm putting in for another thou.
Hundreds of years ago the South
American Indians chewad occa-

leaves to kill fatigue sensations."

"That so? Interesting - and it proves priority for the Indiana doesn't it? I'll make a try for you, Gussy, but don't expect anything." He cleared his throat his eves grew distant and turning his head a little to the right, he enunciated sharply, "Pooh-Bah. Time: Inst oh five. One oh five seven. Oh oh Record: Gussy coca thou budget. Cut." He explained. "We got a voice-cued setter now on the deluxe models. You can record a memo to yourself without taking off your shirt. Incidentally, I use the ends of the hours for trifle-mamos. The already used up the fifty-nines and eights for tomorrow and started on the fifty-sevens"

"I understood most of your memo," Gusterson told him gruff-

r?" ly. "The last 'Oh oh' was for secoff onds, wasn't it? Now I call that als crude — why not microseconds too? But how do you remember where you've made a memo so ey you don't rerecord over it? After de- all, you're rerecording over the

"Tickler beeps and then hunts for the nearest information-free

space."
"I see. And what's the Pooh-Bah for?"

Fay smiled. "Cut. My password for activating the setter, so it won't respond to chance nu-

merals it overhears."
"But why Pooh-Bah?"
Fay grinned, "Cut. And you a

writer. It's a literary reference, Gussy. Pooh-Bah (cut!) was Lord High Everything Else in The Mikedo. He had a little list and nothing on it would ever be missed."

44 OH. YEAR! Gusterson remembered, glowering. As I recall it, all that went on that like was the names of people who were slated to have their heads contained to the state of the state

"Spare me the Marxist mythology." Fay protested. "Gussy, you've got a completely wrong slant on Tickler. It's true that most of our mass sales so far, har government and army, have been to large companies purchasing for their employees — " "Ah-half".

" - but that's because there's nothing like a tickler for teaching a new man his job. It tells him from instant to instant what he must do - while he's already on the job and without disturbing other workers. Magnetizing a wire with a job pattern is the easiest thing going. And you'd be astonished what the subliminals do for employee morale, It's this way. Gussy: most people are too improvident and unimaginative to see in advance the advantages of ticklers. They buy one because the company strongly suggests it and payment is on easy installments withheld from salary. They find a tickler makes the work day go easier. The little fellow perched on your shoulder is a friend exuding comfort and good advice. The first thing he's set to say is 'Take it easy, pal.'

set to say is "Take it easy, pal."
"Within a week they're wearing their tickler 24 hours a day
—and buying a tickler for the
wife, so she'll remember to comb
her hair and smile real pretty
and cook favorite dishes."
"I set it. Fav." Gusterson cut

in. The tickler is the newest fad for increasing worker efficiency. Once, I read somewheres, it was salt tablest. They had salt-table dispensers everywhere, even in the three wants a moist armpit twice a year and the gais sweet only champagne. A decade later per-ple wondered what all those dusty white palls were for Sometimes they were mistook for transmitted they were mistook for they were mistook for the mistook were mistook for they were

a musty closet and see jumbled heaps of these gripping-hand sil-

very gadgets gathering dust curls
and—
"They will not!" Fay protested
vehemently. 'Ticklers are not a
fad — they're history-changers,
they're Free-World revolutionary! Why, before Micro Systems
put a single one on the market,
we'd made it a rule that every
Micro employee had to wear one!
If that's not having supreme conIf that's not having supreme con-

fidence in a product — "
"Byery employee except the top executives, of course." Gusterson interrupted jeeringly. "And that's not demoting you, Fay. As the R & D chief most closely involved, you'd naturally have to

involved, you'd naturally have to show special enthusiasm."
"But you're wrong there, Gussy," Fay crowed. "Man for man, our top executives have been more enthusiastic about their personal ticklers than any other class of worker in the whole outfit."

Gusterson slumped and shook

his head. "If that's the case," he said darkly, "maybe mankind deserves the tickler."

66 LL SAY IT does?" Fay agreed loudly without thinking. Then, "Oh, can the carping, Gussy. Tickler's a great invention. Don't deprecate it just because you had something to do with its genesis. You're going to have to get in the swim and wear heave to get in the swim and wear heaves to get in the swim and wear heavest agreement to be a support to the swim and wear heaves to get in the swim and wear heaves the swim and wear heaves to get in the swim and wear heaves th

"Maybe I'd rather drown horribly."
"Can the gloom-talk too! Gus-

sy, I said it before and I say it again, you're just scared of this new thing. Why, you've even got the drapes pulled so you won't have to look at the tickler factory."

"Yes, I am scared," Gusterson said. "Really sca . . . AWP!"

Fay whirled around. Daisy was standing in the bedroom door way, wearing the short silver sheath. This time there was no mask, but her bobbed hair was glitteringly silvered, while her legs, arms, hands, neck, face every bit of her exposed skin —

every bit of her exposed skin was painted with beautifully even vertical green stripes. "I did it as a surprise for Gusterson," she explained to Fay. "He save he likes me this way.

 The green glop's supposed to be smudgeproof."

Gusterson did not comment. His face had a rapt expression. "I'll tell you why your tickler's "It's not because it backstops the memory or because it boosts the eep with subliminals. It's because it takes the book out of a guy, it takes over the job of withstanding the pressure of living. See, Fay, here are all these little guys in this subtograppen rot race with atomic-death squares and chromium-plated reward squares and enough money if you pass Go almost to get to Go again - and a million million rules of the game to keep in mind. Well here's this one little guy and every morning he wakes up there's all these things he's got to keep in mind to do or he'll lose his turn three times in a row and maybe a terrible black rook in iron armor'll loom up and bane him off the chessboard. But now,

got to remember them. Of course he'll have to do them eventually but meanwhile the pressure's off him, the hook's out of his short hairs. He's shifted the responsibility . . ""Well, what's so bad about that?" Fay broke in loudly.

look, now he's got his tickler and

he tells his sweet silver tickler

all these things and the tickler's

"What's wrong with taking the

THE CREATURE FROM CLEVELAND DEPTHS

pressure off little guys? Why shouldn't Tickler be a super-eys surrogate? Micro's Motivations chief noticed that positive feature straight off and scored it three pluses. Besides, it's nothing but a gaudy way of saying that Tickler backstops the memory. Seriously, Gussy, what's so bad about it?"

"I don't know," Gusterson said slowly, his eyes still far away, "I just know it feels bad to me." He crinkled his big forehead. "Well for one thing," he said, "it means that a man's taking orders from something else, He's got a kind

that a man's taking orders from something else. He's got a kind of master. He's sinking back into a slave psychology."

"He's only taking orders from himself," Fay countered dis-

gustedly. "Tickler's just a mech reminder, a notebook, in essence no more than the back of an old envelope. It's no master." "Are you absolutely sure of that?" Gusterson asked quietly.

"Why, Gussy, you big oaf —"
Fay began heatedly. Suddenly
his features quirked and he
twitched. " 'Scuse me, folks," he
said rapidly, heading for the
door, "but my tickler told me I
gotta so."

"Hey Fay, don't you mean you told your tickler to tell you when it was time to go?" Gusterson called after him.

Fay looked back in the doorway. He wet his lips, his eyes

hy moved from side to side. "I'm not go quite sure," he said in an odd ns strained voice and darted out.

GUSTERSON stared for some seconds at the pattern of emptiness Fay had left. Then he shivered. Then he shrugged. "I must be slipping." he muttered. "I never even suggested some-

thing for him to invent," Then he looked around at Daisy, who was still standing poker-faced in her doorway.
"Hey, you look like something

out of the Arabian Nights," he told her. "Are you supposed to be anything special? How far do those stripes go, anyway?"

"You could probably find out," she told him coolly. "All you have to do is kill me a dragon or two first."

He studied her. "My God," he said reverently, "I really have all the fun in life. What do I do to deserve this?"

"You've got a big gun," she told him, "and you go out in the world with it and hold up big companies and take yards and yards of money away from them in rolls like ribbon and bring it all home to me."

"Don't say that about the gun again," he said, "Don't whisper it, don't even think it. I've got one, dammit — thirty-eight caliber, yet — and I don't want some prignic monitor, with two-way clairaudience they haven't told me about catching the whisper and coming to take the gun away from us. It's one of the few individuality symbols we've got left."

viduality symbols we've got left."
Suddenly Daisy whirled away
from the door, spun three times
so that her silvered hair stood
out like a metal coolie hat, and
sank to a curtsey in the middle

of the room.
"I've just thought of what I am," she announced, fluttering her eyelashes at him. "I'm a sweet silver tickler with green stripes."

v

NEXT day Doisy cashed the Micro check for ten funded silver smackers, which she hid in a broken radionic coffee urn. Gusterson sold his insanity novel and started a new one movel and started a new one micked Moodmasters to turn mental patients into symphomanics, mass murderer and compulsive saints. But this time he couldn't get Pay out of his mind, or the last childing words minded the man had specially an extra contract of the country of the couldn't get Pay out of his mind, or the last childing words mind the property of the country of th

For that matter, he couldn't blank the underground out of his mind as effectively as usually. He had the feeling that a new kind of mole was loose in the burrows and that the ground at

told the foot of their skyscraper might start humping up any minute.

Toward the end of one afterindinon he tucked a half dozen new-left." by typed sheets in his pocket.

ly typed sheets in his pocket, shrouded his typer, went to the hatrack and took down his prize: a miner's hard-top cap with electric headlamp.

"Goin' below, Cap'n," he shout-

"Be back for second dog watch," Daisy replied. "Remember what I told you about lassoing me some art-conscious girl neighbore."

"Only if I meet a plebald one with a taste for Scotch — or maybe a pearl gray biped jaguar with violet spots," Gusterson told her, clapping on the cap with a Wewho Are-About-To-Die gesture.

Halfway across the park to the escalator bunker Gusterson's heart began to tick. He resolutely switched on his headlamp.

As he'd known it would, the

hatch robot whirred an extra and higher-pitched ten seconds when it came to his topside address, but it ultimately dilated the hatch for him, first handing him a claim check for his ID card. Gusterson's heart was ticking

Gusterson's heart was ticking like a sledgehammer by now. He hopped clumsily onto the escalator, clutched the moving guard rail to either side, then shut his eyes as the steps went over the edge and became what felt like vertical. An instant later he forced his eyes open, unclipped a hand from the rail and touched the second switch beside his head. lamp, which instantly began to blink whitely, as if he were a civilian plane flying into a nest of military jobs.

With a further effort he kept his eyes open and flinchingly surveved the scene around him. After zigging through a bombproof half-furlong of roof, he was dropping into a large twilit cave. The blue-black ceiling twinkled with stars. The walls were pierced at floor level by a dozen archways with busy niche stores and glowing advertisements crowded between them. From the archways some three dozen slidewalks curved out, tangenting off each other in a bewildering multiple cloverleaf. The slidewalks were packed with people, traveling motionless like purposeful statues or pivoting with practiced grace from one slidewalk to another. like a thousand toreros doing veronicas.

THE slidewalks were moving faster than he recalled from his last venture underground and at the same time the whole pedestrian concourse was quieter than he remembered. It was as if the five thousand or so moles in view were all listening - for what? But there was something else

that had changed about them a change that he couldn't for a moment define or unconsciously didn't want to. Clothing style? No. My God, they weren't all wearing identical monster masks? No . . . Hair color? . . . Well . . . He was studying them so in-

tently that he forgot his escalator was landing. He came off it with a heel-jarring stumble and bumped into a knot of four men on the tiny triangular hold-still. These four at least sported a new stylewrinkle: ribbed gray shouldercares that made them look as if their heads were poking up out of the center of bulgy umbrellas

One of them grabbed hold of Gusterson and saved him from staggering onto a slidewalk that might have carried him to To-"Gussy, you dog, you must

or giant mushrooms.

have esped I wanted to see you." Fay cried, patting him on the elbows, "Meet Davidson and Kester and Hazen, colleagues of mine We're all Micro-men." Fay's companions were staring strangely at Gusterson's blinking headlamp. Fay explained rapidly. "Mr. Gusterson is an insanity

novelist. You know, I-D." "Inner-directed spells id." Gusterson said absently, still staring at the interweaving crowd bevond them, trying to figure out last trip. "Creativity fuel. Cranky. Explodes through the parietal fissure if you look at it cross-eyed." "Ha-ha," Fay laughed. "Well,

boys, I've found my man. How's the new novel perking, Gussy?"
"Got my climax, I think," Gusterson mumbled, still peering puzzledly around Fay at the slidestanders. "Moodmaster's so-

sildestanders. "Moodmaster's going to come airw. Ever occur to you that 'mood' is 'doom' spelled backwarde' And then..." He backwarde' And then... "I de backwarde' And then... 'I de ised that Kester and Davidson and Hasen had made their farewells and were sliding into the distance. He reminded himself wyly that nobody ever wants to hear an author talk— he's much too good a listener to be wasted that way. Let's see, was it that that way. Let's see, was it that same facial expression. , 2 Or showed symptoms of the series

"I was coming to visit you, but now you can pay me a call." Fay was saying. "There are two matters I want to —" Gusterson stiffened. "My God, they're all hunchbacked!" he velled.

disease . . .?

"Shil Of course they are," Fay whispered reprovingly. "They're all wearing their ticklers. But you don't need to be insulting about it."

"I'm gettin' out o' here." Gusterson turned to flee as if from

five thousand Richard the Thirds.

"Oh no you're not," Fay amended, drawing him back with one hand. Somehow, underground, the little man seemed to carry more weight. "You're having cocktails in my thinking box. Besides, climbing a down escaladder will give you a heart attack."

N HIS home habitat Gusterson was about as easy to handle as a rogue rhinoceros, but away from it - and especially if underground — he became more like a pliable elephant. All his bones dropped out through his feet, as he described it to Daisy. So now he submitted miserably as Fay surveyed him up and down, switched off his blinking headlamp ("That coalminer caper is corny, Gussy,") and thensurprisingly — rapidly stuffed his belt-bag under the right shoulder of Gusterson's cost and buttoned the latter to hold it in place.

explained. Another swift survey.
"You'll do. Come on, Gussy. I got
lots to brief you on." Three rapid
paces and then Gustraco's feet
would have gone out from under
him except that Fay gave him a
mighty shove. The small man
sprang onto the slidewalk efter
him and then they were skim
ming effortlessly side by side.
Gusterson felt frightneed and

35

"So you won't stand out," he

twice as hunchbacked as the slidestanders around him - morally as well as physically. Nevertheless he countered

bravely, "I got things to brief you on. I got six pages of cautions on ti -

"Shh!" Fay stopped him. "Let's use my hushbox."

He drew out his pancake phone and stretched it so that it covered both their lower faces, like a double vashmak. Gusterson, his neck pushing into the ribbed bulge of the shoulder cape so he could be cheek to cheek with Fay, felt horribly conspicuous, but then he noticed that none of the slidestanders were paying them the least attention. The reason for their abstraction occurred to him. They were listening to their ticklers! He shud-

"I got six pages of caution on ticklers," he repeated into the hot. moist quiet of the pancake phone. "I typed 'em so I wouldn't forget 'em in the heat of polemicking, I want you to read every word, Fay, I've had it on my mind ever since I started wondering whether it was you or your tickler made you duck out of our place last time you were there. I want

you to-"Ha-ha! All in good time." In the pancake phone Fay's laugh was brassy, "But I'm glad you've decided to lend a hand, Gussy, nation of photo-memory constant-

This thing is moving fanassst. Nationwise, adult underground ticklerization is 90 per cent complete."

"I don't believe that," Gusterson protested while glaring at the hunchbacks around them. The slidewalk was gliding down a low glow-ceiling tunnel lined with doors and advertisements. Rapteved people were pirouetting on and off, "A thing just can't develop that fast, Fay, It's against

notire "

"He, but we're not in nature. we're in culture. The progress of an industrial scientific culture is geometric. It goes n-times as many jumps as it takes. More than geometric - exponential. Confidentially, Micro's Math chief tells me we're currently on a fourth-power progress curve trending into a fifth."

"You mean we're goin' so fast we got to watch out we don't bump ourselves in the rear when we come around again?" Gusterson asked, scanning the tunnel ahead for curves. "Or just shoot straight up to infinity?"

"Exactly! Of course most of the last power and a half is due to Tickler itself. Gussy, the tickler's already eliminated absenteeism, alcoholism and aboulia in numerous urban areas - and that's just one letter of the alphabet! If Tickler doesn't turn us into a

dered.

creative-flow geniuses in six months, I'll come live topside."

66YOU mean because a lot of people are standing around glassy-eyed listening to something mumbling in their ear that

it's a good thing?" "Gussy, you don't know progress when you see it. Tickler is the greatest invention since language Bar none it's the greatest instrument ever devised for integrating a man into all phases of his environment. Under the pres-

ent routine a newly purchased tickler first goes to government and civilian defense for primary patterning, then to the purchaser's employer, then to his doctorpsycher, then to his local bunker captain, then to him. Everything that's needful for a man's welfare gets on the spools. Efficiency cubed! Incidentally, Russia's got the tickler now Our dip-satellites have photographed it. It's like ours except the Commies wear it on the left shoulder . . . but they're two weeks behind us developmentwise and they'll never close the gap!"

Gusterson reared up out of the pancake phone to take a deep breath. A sulky-lipped sylph-figured girl two feet from him twitched - medium cootch, he judged - then fumbled in her belt-bag for a pill and popped it in her mouth

"Hell the tickler's not even efficient yet about little things," Gusterson blatted, diving back into the privacy-yashmak he was sharing with Fay, "Whyn't that girl's doctor have the Moodmaster component of her tickler inject her with medicine?"

"Her doctor probably wants her to have the discipline of pilltaking - or the exercise," Fav answered glibly, "Look sharp now, Here's where we fork, I'm taking you through Micro's postorn"

A ribbon of slidewalk split itself from the main band and angled off into a short alley. Gusterson hardly felt the constant-speed juncture as they crossed it. Then the secondary ribbon speeded up, carrying them at about 30 feet a second toward the blank concrete wall in which the alley ended, Gusterson prepared to jump, but Fay grabbed him with one hand and with the other held up toward the wall a badge and a button. When they were about ten feet away the wall whipped aside, then whipped shut behind them so fast that Gusterson wondered momentarily if he still had his heels and the

seat of his pants. Fay, tucking away his badge and pancake phone, dropped the button in Gusterson's vest pocket, "Use it when you leave," he said

37

Gusterson, who was trying to read the Do and Don't posters papering the walls they were passing, started to probe that last sinister supposition, but just then the ribbon slowed, a swinging door opened and closed behind them and they found themselves in a luxuriously furnished thinking box measuring at least eight feet by five.

66 LIEY, this is something," Gusterson said appreciatively to show he wasn't an utter vokel. Then, drawing on research he'd done for period novels. "Why, it's as big as a Pullman car compartment, or a first mate's cabin in the War of 1812. You really must rate."

Fay nodded, smiled wanly and est down with a sigh on a compact overstuffed swivel chair, He let his arms dangle and his head sink into his puffed shoulder cape, Gusterson stared at him. It was the first time he could ever recall the little man showing fatique.

"Tickler currently does have one serious drawback," Fay volunteered, "It weighs 28 pounds, You feel it when you've been on your feet a couple of hours. No question we're going to give the next model that antigravity feature you mentioned for pursuit grenades. We'd have had it in this model except there were so many

other things to be incorporated." He sighed again, "Why, the scanning and and decision-making elements alone tripled the mass." "Hey." Gusterson protested. thinking especially of the sulkylipped girl, "do you mean to tell

me all those other people were toting two stone?"

Fay shook his head heavily. "They were all wearing Mark 3 or 4. I'm wearing Mark 6," he said, as one might say, "I'm carrying the genuine Cross, not one of the balsa ones" But then his face brightened a

little and he went on, "Of course the new improved features make it more than worth it . . . and you hardly feel it at all at night when you're lying down . . . and if you remember to talcum under it twice a day, no sores develop . . . at least not very big ones . . .

Backing away involuntarily. Gusterson felt something prod his right shoulderblade. Ripping open his coat, he convulsively plunged his hand under it and tore out Fav's belt-bag . . . and then set it down very gently on the top of a shallow cabinet and relaxed with the sigh of one who has escaped a great, if symbolic, danger. Then he remembered something Fay had mentioned.

He straightened again. "Hey, you said it's got scanning and decision-making elements. That means your tickler thinks. even by your fancy standards.
And if it thinks, it's conscious."
Gussy," Fay said wearily,
frowning, "all sorts of things nowadays have S&DM elements.
Mail sorters, missiles, robot medics, high-style mannequins, just to
name some of the Ms. They
thinks, to use that archice word.

think, to use that archise word, but it's neither here nor there. And they're certainly not conscious."
"Your tickler thinks," Gusterson repeated stubbornly, "just like I warned you it would. It sits

nke I warned you it would. It sits on your shoulder, ridin' you like you was a pony or a starved St. Bernard, and now it thinks."
"Suppose it does?" Fay yawned.

"What of it?" He gave a rapid sinuous one-sided shrug that made it look for a moment as it his left arm had three elbows. It stuck in Gusterson's mind, for had never seen Fay use such a logesture and he wondered where the picked it up. Mr. Merco R. sance chief? Fay yawned again and said, "Please, Gussy, don't disturb me for a minute or so." His eyes half closed.

Gusterson studied Fay's sunken-cheeked face and the great puff of his shoulder cape.

"Say, Fay," he asked in a soft voice after about five minutes, "are you meditating?"

"Why, no," Fay responded, starting up and then stifling an-

other yawn. "Just resting a bit."
I seem to get more tired these
days, somehow. You'll have to excuse me, Gussy. But what made
you think of meditation?"

you have the state of the state

"Of course not," Fay denied with a bright incredulous laugh. "Who'd want to loaf around in an imaginary world and take a chance of missing out on what his tickler's doing? — I mean, on what his tickler has in store for him — what he's told his tickler to have in store for him."

Ignoring Gusterson's shiver.

Know any of the people using

Tickler that way hev?"

Fay straightened up and seemed to brisken himself. "Ha, that little slump did me good. A tickler makes you rest, you know it's one of the great things about it. Pooh-Bah's kinder to me than I ever was to myself." He button ed open a tiny refriserator and

20

cubes and handed one to Gusterson. "Martini? Hope you don't mind drinking from the carton, Cheers. Now, Gussy old pal, there are two matters I want to take

Cheers. Now, Gussy old pal, there are two matters I want to take up with you — "

"Hold it." Gusterson said with

"Hold it," Gusterson said with something of his old authority.
"There's something I got to get off my mind first." He pulled the typed pages out of his inside pocket and straightened them. "I told you about these," he said.

you do anything else. Here."

Fay looked toward the pages and nodded, but did not take them yet. He lifted his hands to his throat and unhooked the clasp of his cape, then hesitated.

"You wear that thing to hide the hump your tickler makes?" Gusterson filled in. "You got better taste than those other moles." "Not to hide it, exactly," Fay

"Not to hide it, exactly," Fay protested, "but just so the other work be jealous. I wouldn't feet comfortable parading a free scanning decision-capable Mark of tickler in front of people who can't buy it — until it goes on open sale at twenty-two fifteen tonight. Lot of shelterfolk worl' be aleeping tonight. They'll be aleeping tonight. They'll be tickler for a Mark 6 almost as good as Pool-Bah."

He started to jerk his hands

apart, hesitated again with an

took out two waxed cardboard oddly apprehensive look at the cubes and handed one to Guster-big man, then whirled off the same.

VI

GUSTERSON sucked in auch a big gasp that he hiccuped. The right shoulder of Fay's jacket and shirt had been cut away. Thrusting up through the neady hemmed hole was a silvery gray hump with a one-eyed turret atop it and two multi-jointed metal arms ending in little claws.

metal arms ending in little claws. It looked like the top half of a pseudo-science robot — a squat evil child robot, Gusterson told himself, which had lost its legs in a railway accident — and it seemed to him that a red fleck was moving around imperceptibly in the huge single eye.

"Ill like that menn now." Faw

said coolly, reaching out his hand. He cought the rustling sheets as they slipped from Gusterson's fingers, evened them up very precisely by tapping them on his knee . . and then handed them over his shoulder to his tickler, which clicked its claws around either margin and then began rather swiftly to lift they sheet past its single eye at a top sheet past its single eye at a

distance of about six inches.

"The first matter I want to
take up with you, Gussy," Fay
began, paying no attention whatsoever to the little scene on his

shoulder, "— or warn you about, rather — is the imminent tick-lerization of schoolchildren, geratires, convicts and topsiders. At three zero zero tomorrow ticklers become mandatory for all adult selterfolk. The mop-up operations won't be long in coming — in fact, these days we find that the square root of the estimated time of a new development is

generally the best time estimate. Gussy, I strongly advise you to start wearing a tickler now. And Daisy and your moppets. If you heed my advice, your kids will have the jump on your class. Transition and conditioning are easy, since Tickler itself sees to

it."

Pooh-Bah leafed the first page to the back of the packet and be-

gan lifting the second past his eye — a little more swiftly than the first.

"I've got a Mark 6 tickler all

warmed up for you," Fay pressed,
"and a shoulder cape. You won't
feel one bit conspicuous." He noticed the direction of Gusterson's
gaze and remarked, "Rescinating
mechanism, isn't it? Of course 28
pounds are a bit oppressive, but
then you have to remember it's
only a way-station to free-floating
Mark 7 or 8."

Pooh-Bah finished page two and began to race through page three.

"But I wanted you to read it."

ut, Gusterson said bemusedly, star-

ing.

eri
"Pooh-Bah will do a better job
At than I could," Fay assured him.

Get the gist without losing the

chaff."

"But dammit, it's all about him," Gusterson said a little more strongly. "He won't be objective about it"

"A better job," Fav reiterated, "and more fully objective, Pooh-Bah's set for full precis. Stop worrying about it. He's a dispassionate machine, not a fallible, emotionally disturbed human misled by the will-o'-the-wisp of consciousness. Second matter: Micro Systems is impressed by your contributions to Tickler and will recruit you as a senior consultant with a salary and thinking hox as hig as my own, family quarters to match. It's an unheard-of high start, Gussy, I think you'd be a fool-"

IF ERROKE of, held up a hand for silence, and his eyes got a listening fook. Pooh-Bah had finished page six and was holding the packet motionless. After about ten seconds Fay's face broke into a big fake smile. He stood up, suppressing a wince, and held out his hand. "Gussy," inform you that all your fears about Tickler are so much thisted-down. My word on it. There's



nothing to them at all. Pooh-Bah's precis, which he's just given to me, proves it."

"Look," Gusterson said solemnly, "there's one thing I want you to do. Purely to humor an old friend. But I want you to do it. Read that memo yourself."

"Certainly I will, Gussy," Fay continued in the same chullient tones. "I'll read it—" he twitched and his smile disappeared — "a little later."

"Sure," Gusterson said dully, bolding his hand to his stomach. "And now if you don't mind, Fay, I'm goin' home. I feel just a his sick. Maybe the ozone and the other additives in your shelter air are too heady for me. It's been years since I tramped through a pine forest."

"But Gussy! You've hardly got here. You haven't even sat down. Have another martini. Have a seltzer pill. Have a whiff of oxy. Have a..."

"No, Fay, I'm going home right away. I'll think about the job offer. Remember to read that memo."

"I will, Gussy, I certainly will. You know your way? The button takes you through the wall. By, now."

He sat down abruptly and blooked away. Gusterson pushed dthrough the swinging door. He tensed himself for the step across onto the slowly-moving reverse was

ribbon. Then on a impulse he pushed ajar the swinging door and looked back inside.

Fay was sitting as he'd lefthim, apparently lost in littless brooding. On his shoulder Poot-Bah was rapidly crossing and uncrossing its little metal arms, tearing the memo to smaller and smaller shreds. It let the scraps drift slowly toward the floor and oddly writhed its three-elbowed left arm... and then Gusterson left arm... and then Gusterson what, Fay had copied his new strue.

VII

WHEN Gusterson got home toward the end of the second dog watch, he slipped saids from Daisy's questions and set the children laughing with a graphic enactment of his slidestanding technique and a story about getting his head caught in a thinking box built for a midget physicist. After suppore he played physicist. After suppore he played

with Imogene, Iago and Claudius until it was their bedtime and thereafter was unusually attentive to Daisy, admiring her fading green stripes, though he did spend a while in the next apartment, where they stored their outdoor camping equipment.

43

But the next morning he announced to the children that it was a holiday — the Feast of St. Gusterson-and then took Daisy

into the hadroom and told her overething When he'd finished she said.

"This is something I've got to see for myrealf " Gusterson shrugged, "If you think you've got to. I say we should head for the hills right now One thing I'm standing on:

the kids aren't going back to school "

"Agreed," Daisy said, "But, Gustarson we've lived through a lot of things without leaving home altogether We lived through the Everyhody-Siy-Feet-Underground-by-Christmas compaign and the Robot Watchdor eraze when you got your left foot half chewed off We lived through the Venomous Bats and Indoctrinated Saboteur Rats and the Hypnotized Monkey Paratrooper scares. We lived through the Voice of Safety and Anti-Communist Somno-Instruction and Rightest Pills and Jet-Propelled Vigilantes. We lived through the Cold-Out, when you weren't supposed to turn on a toaster for

fear its heat would be a target for prowl missiles and when people with fevers were unpopular. We lived through-"

Gusterson patted her hand. "You go below," he said, "Come back when you've decided this is different. Come back as soon as you can anyway. I'll be worried

about you every minute you're down there

When she was gone - in a green suit and hat to minimize or at least justify the effect of the faded stripes - Gusterson doled out to the children provender and equipment for a camping expedition to the next floor Isso led them off in stealthy Indian file. Leaving the hall door open Gusterson got out his 38 and cleaned and loaded it meanwhile concentrating on a chees problem with the idea of confusing a hypothetical prionic monitor. By the time he had hid the revolver again he heard the elevator creaking back un

DAISY came dragging in without her hat, looking as if she'd been concentrating on a chess problem for hours herself and just now given up. Her stripes seemed to have vanished; then Gustareon decided this was hecause her whole complexion was a touch green. She sat down on the edge of

the couch and said without looking at him, "Did you tell me, Gusterson, that everybody was quiet and abstracted and orderly down below especially the ones wearing ticklers, meaning pretty much everybody?" "I did" he said "I take it that's

no longer the case. What are the new symptoms?*

She gave no indication. After some time she said, "Gusterson, do you remember the Docé illustrations to the Inferno? Can you visualize the paintings of Hieronymous Bosch with the hordes of proto-Freudian devils tormenting people all over the farmyard and city square? Did you ever Moussorgaky's witches' sabbath music? Back in the foolish days before you married me, did that before you married me, did that

drug-addict girl friend of yours ever take you to genuine orgy? "As bad as that, hey?" She nodded emphatically and all of a sudden shivered violently. "Several shades worse," she said. "If they decide to come topside..." She shot up, "Where are the bide."

"Upstairs campin' in the mysterious wilderness of the 21st floor," Gusterson reassured her. "Let's leave 'em there until we're ready to—"

He broke off. They both heard the faint sound of thudding footsteps.

"They're on the stairs," Daisy

whispered, starting to move toward the open door. "But are they coming from up or down?" "It's just one person," judged Gusterson, moving after his wife. "Too heavy for one of the kids." The footsteps doubted in volume and came rapidly closure. Alone with them there was an

ter agonized gasping. Daisy stopped, on, staring fearfully at the open doorasway. Gusterson moved past her. ou Then he stopped too.

Fay stumbled into view and would have fallen on his face except he clutched both sides of the doorway halfway up. He was tripped to the waist. There was little blood on his shoulder, His narrow chest was arching convulsively, the ribs standing out starkly, as he sucked in oxygen to replace what he'd burned up running, up twenty flights. His even were will.

"They've taken over," he panted. Another gobbling breath.
"Gone crazy." Two more gasps.
"Gotta stop 'em."

His eyes filmed. He swayed forward. Then Gusterson's big arms were around him and he was carrying him to the couch.

DAISY came running from the kitchen with a damp cool towel. Gusterson took it from her and began to mop Fay off. He sucked in his own breath as he saw that Fay's right ear was raw and torn. He whispered to Daisy. 'Look at where the thine savesed

him."

The blood on Fay's shoulder came from his ear. Some of it stained a flush-akin plastic fitting that had two small valved holes in it and that puzzled Gusterson until he remembered that Mood.

45

master tied into the bloodstream. For a second he thought he was going to vomit.

The dazed look slid aside from Fay's eyes. He was gasping less painfully now. He sat up, pushing the towel away, buried his face in his hands for a few seconds, then looked over the fingers at the two of them.

The been living in a nightmare for the last week," he said in a taut small voice, 'knowing the thing had come alive and trying to pretend to myself that it hadn't. Knowing it was taking charge of me more and more. Having it whisper in my ear, over and over again, in a cracked little three, the L could only hear.

every bundredth time. Day by

day, in every way, you're learning

to listen and ofer Day by day_'" His voice started to go high. He pulled it down and continued harshly, "I ditched it this morning when I showered. It let me break contact to do that. It must have figured it had complete control of me, mounted or dismounted. I think it's telepathic, and then it did some, well, rather unpleasant things to me late last night. But I pulled together my fears and my will and I ran for it. The slidewalks were chaos. The Mark 6 ticklers showed some purpose, though I couldn't tell you

what but as far as I could see

mouth and rocked back and forth on the couch. Gusterson gently but firmly laid a hand on his good shoulder. "Steady," he said, "Here, swallow

this."

Fay shoved aside the short brown drink. "We've got to stop them," he cried. "Mobilise the toposiders — contact the widerness patrols and manned satellities — pour exher in the tunnel sirpumps — invent and crashmanufacture missiles that will home on ticklers without harming humans — SOS Mars and Vorus — OS Mars and with the sirpumps of the wider without harming humans — SOS Mars and with the vorus — dope the shelter water supply — do something Guay, you don't realize what people are going through down there

"I think they're experiencing the ultimate in outer-directedness," Gusterson said gruffly.

every second."

ness," Gusterson said gruffly.

"Have you no heart?" Gay demanded. His eyes widened, as if he were seeing Gusterson for the first time. Then, accusingly, pointing a shaking finger: "You in-

vented the tickler, George Gusterson! It's all your fault! You've got to do something about it!"

Before Gusterson could retort to that, or begin to think of a reply, or even assimilate the full enormity of Fay's statement, he was grabbed from behind and frog-marched away from Fay and something that felt remarkably like the muzzle of a large-caliber son was showed in the small of

his back

UNDER COVER of Fay's outburst a huge crowd of people had entreed the room from the hall—eight, to be exact. But the weidest thing about them to Gusterson was that from the first instant he had the impression that only one mind had entreed the room and that it did not reorder though the room of the control of the control of the order though the room of the control of them, but in something that they were carrying.

this impression. The eight people all had the same blank expression — watchful yet empty-eyed. They all moved in the same sithery crouch. And they had all taken off their shoes. Perhaps, Custerson thought wildly, they believed he and Daisy ran a Japanese flat. Gusterson was being held by two burly women, one of them

quite pimply. He considered

stamping on her toes, but just at that moment the gun dug in his back with a corkscrew move-

The man holding the gun on him was Fay's colleague Davidson. Some yards beyond Fay's couch, Kestre was holding a gun on Daisy, without digging it into her, while the single strange man holding Daisy herself was deing o quite decorosaly— a circumstance which afforded Gusteron minor relief, since it made him feel less gully about not going herself.

Two more strange men, one of them in purple lounging pajamas, the other in the lounging pajamas, the other in the gray uniform of a slidewalk inspector, had grabbed Fay's skinny upper arms, one on either side, and were lifting him to his feet, while Fay was struggling with such desperate futility and gibbering so pitfully that Gusterson momentarily had second thoughts about the moral inspect by to go force. But again the you dug into him with a twice.

Approaching Fay face-on was the third Micro-man Gusterson had met yesterday — Hazen. It was Hazen who was carrying quite reverently or solemnly or at any rate very carefully the object that seemed to Gusterson to be the mind of the little storm troop presently descerating the sanctity of his own individual home.

All of them were wearing ticklers, of course — the three Micromen the heavy emergent Mark 6s with their clawed and jointed arms and monocular cephalic turrets, the rest lower-numbered Marks of the sort that merely made Richard-the-Third humps

under clothing.
The object that Hazen was
carrying was the Mark 6 tickler
Gusteron had seen Fay waring
yesterday. Gusteron was sure it
of command, and because he
would have swern on a mountain
of command, and because he
would have swern on a mountain
of Elibles that he recopnized the
red fleck lurking in the back of
its single eye. And Pook-Bah
alone had the auras of full conhad muse.

Mark 1900-180 had been been alone had muse.

IT IS NOT good to see an evil legless child robot with danling straps bossing — apparentby by telepathic power — not only three objects of its own kind and five close primitive relatives, and in addition throwing into a state of twitching terror one miserable, thin-chested, half-crays research-and development direc-

tor.

Pooh-Bah pointed a claw at
Fay. Fay's handlers dragged him
forward, still resisting but more

al feebly now, as if half-hypnotized or at least cowed.

Gusterson grunted an outraged, "Hey!" and automatically struggled a bit, but once more the gun dug in Daisy shut her eyes, then firmed her mouth and opened them again to look. Seating the tickler on Fay's

shoulder took a little time, because two blunt spikes in its bottom had to be fitted into the valved holes in the flush-skin plastic disk. When at last they plunged home Gusterson felt very sick indeed — and then even more so, as the tickler itself poked a tiny pellet on a fine wire

The next moment Fay had straightened up and motioned his handlers aside. He tightened the strops of his tickler around his chest and under his armnits. He held out a hand and someone gave him a shoulderless shirt and coat. He slipped into them smoothly. Pooh-Bah dexterously using its little claws to help put its turret and body through the neatly hemmed holes. The small storm troop looked at Fay with deferential expectation. He held still for a moment, as if thinking, and then walked over to Gusterson and looked him in the face

and again held still.

Fay's expression was jaunty on
the surface, agonized underneath.

into Fay's car.

Gusterson knew that he wasn't

thinking at all, but only listening for instructions from something that was whispering on the very threshold of his inner ear.

"Gussy, old boy," Fay said, twitching a depthless grin, "I'd be very much obliged if you'd answer a few simple questions." His voice was hoarse at first but he swallowed twice and cor-

rected that, "What exactly did you have in mind when you invented ticklers? What exactly are they supposed to be?"

"Why, you miserable — " Gusterson began in a kind of confused horror, then got hold of himself and said curtly, "They were supposed to be mech reminders. They were supposed to record memoranda and - "

Fay held up a palm and shook his head and again listened for a space. Then, "That's how ticklers were supposed to be of use to humans," he said, "I don't mean that at all I mean how ticklers were supposed to be of use to themselves. Surely you had some notion." Fay wet his line "If it's any help," he added, "keep in mind that it's not Fay who's asking this question, but Pooh-Bah."

Gusterson hesitated. He had the feeling that every one of the eight dual beings in the room was hanging on his answer and that something was boring into his mind and turning over his next thoughts and peering at and

under them before he had a chance to scan them himself. Pooh-Bah's eye was like a red searchlight. "Go on." Fay prompted. "What

were ticklers supposed to be for themselves?" "Nothin'." Gusterson said soft-

ly, "Nothin' at all,"

HE COULD FEEL the disap-pointment well up in the room - and with it a touch of something like panic.

This time Fay listened for quite a long while. "I hope you don't mean that, Gussy," he said at last very carnestly. "I mean, I hope you hunt deep and find some ideas you forgot or maybe never realized you had at the time. Let me put it to you differently. What's the place of ticklers in the natural scheme of things? What's their aim in life? Their special reason? Their gen-

ius? Their final cause? What gods should ticklers worship?" But Gunderson was already shoking his head. He said "I don't know anything about that at all." Fav sighed and gave simul-

taneously with Pooh-Bah the now-familiar triple-joined shrug. Then the man briskened himself. "I guess that's as far as we can get right now," he said, "Keep thinking, Gussy. Try to remember something. You won't be able me, tell them. Or just think — In due course you'll be questioned further in any case. Perhaps by special methods. Perhaps you'll be ticklerized. That's all. Come on, everybody, let's get go-

The pimply woman and her pal let go of Gusterson, Daisy's man loosed his decorous hold, Davidson and Kester sidled away with an eye behind them and the little store troop trudeed out.

Fay looked back in the doorway. "I'm sorry, Gussy," he said and for a moment his old self looked out of his eyes. "I wish I could — " A claw reached for his ear, a spasm of pain crossed his face, he stiffened and marched off. The door shut.

Gusterson took two deep breaths that were close to angry sobs Then, still breathing stentorously, he stamped into the bedroom.

"What --- ?" Daisy asked, looking after him.

He came back carrying his 38

and headed for the door.
"What are you up to?" she demanded, knowing very well.

"I'm going to blast that iron monkey off Fay's back if it's the last thing I do!"

She threw her arms around him. "Now lemme go," Gusterson

to leave your apartment — I'm growled. "I gotta be a man one setting quards. If you want to see time anyway."

As they struggled for the gun, the door opened noiselessly, Davidson slipped in and deftly snatched the weapon out of their hands before they realized he was there. He said nothing, only smiled at them and shook his head in sad reproof as he went out.

GUSTERSON slumped. "I knew they were all psionic," he said softly. "I just got out of

he said softly. "I just got out of control now — that last look Fay gave us." He touched Daisy's arm. "Thanks, kid." He walked to the glass wall

and looked out desultorily. After a while he turned and said, "Maybe you better be with the kids, hey? I imagine the guards'll let you through."

Daisy shook her head. "The

kids never come home until supper. For the next few hours they'll be safer without me." Gusterson nodded vaguely, sat down on the couch and propped

his chin on the base of his palm.
After a while his brow smoothed
and Daisy knew that the wheels
had started to turn inside and the
electrons to jump around — except that she reminded herself to
permanently cross out those particular figures of speech from her
yooghulary.

terson said softly, "I think the ticklers are so psionic that it's as if they just had one mind. If I were with them very long I'd start to be part of that mind. Say something to one of them and

you say it to all."

Fifteen minutes later: "They're
not crazy, they're just newborn.
The ones that were creating a
cootching chaos downstairs were
like babies kichi' their legs and

wavin' their eyes, tryin' to see what their bodies could do. Too bad their bodies are us." Ten minutes more: "I gotta do something about it. Fay's right.

something about it. Fay's right.
It's all my fault. He's just the apprentice; I'm the old sorcerer himself."

Five minutes more, gloomily:
"Maybe it's man's destiny to
build live machines and then bow
out of the cosmic picture. Except
the ticklers need us, dammit, just
like nomads need horses,"

Another five minutes: "Maybe sembody could dream up a purpose in life for ticklers. Even a religion — the First Church of Pooh-Bah Tickler. But I hate selling other people spiritual ideas and that'd still leave ticklers parasitic on humans..."

As he murmured those last words Gusterson's eyes got wide as a maniac's and a big smile reached for his ears. He stood up and faced himself toward the door.

"What are you intending to do now?" Daisy asked flatly. "I'm merely goin' out an' save the world," he told her, "I may

the world," he told her. "I may be back for supper and I may not."

VIII

DAVIDSON pushed out from the wall against which he'd been resting himself and his two-stone tickler and moved to block the hall. But Gusterson simply walked up to him. He shook his hand warmly and looked his tickler full in the eye and said in a ringing voice, "Ticklers should have bodies of their own!" He nauted and then added cassally.

"Come on, let's visit your boss."
Davidson listened for instructions and then nodded. But he watched Gusterson warily as they walked down the hall.
In the elevator Gusterson re-

peated his message to the second guard, who turned out to be the pimply woman, now wearing shoes. This time he added, "Ticklers shouldn't be tied to the frail bodies of humans, which need a lot of thoughtful supervision and drug-njecting and cart veen fly."

crug-injecting and can't even fly."

Crossing the park, Gusterson stopped a hump-backed soldier and informed him, "Ticklers gotta cut the apron string and snap the silver cord and go out in the universe and find their own pur-

poses." Davidson and the pimply woman didn't interfere. They merely waited and watched and then led Gusterson on.

On the escaladder he told someone, "It's cruel to tie ticklers to slow-witted snaily humans when ticklers can think and live ten thousand times as fast," he finished, plucking the figure

from the murk of his unconscious.

By the time they got to the bottom, the message had become,

"Ticklers should have a planet of

"Ticklers should have a planet their own!"

They never did catch up with Fay, although they spent two hours skimming around on slidewalks, under the subterranean stars, pursuing rumors of his presence. Clearly the boss tickler (which was how they thought of Pooh-bah) led an energetic life. Gusterson continued to deliver his message to all and sundry at 30-second intervals. Toword the end he found himself doing it in a dreamy and forgetful way. His mind, he decided. was becoming assimilated to the communal telepathic mind of the ticklers. It did not seem to matter at the time.

After two hours Gusterson realized that he and his guides were becoming part of a general movement of people, a flow as mindless as that of blood corpuscles through the veins, yet at the same time dimly surposeful.

— at least there was the feeling that it was at the behest of a mind far above.

The flow was topside. All the slidewalks seemed to lead to the concourses and the escaladders. Gusterson found himself part of a human stream moving into the tickler factory adjacent to his apartment — or another factory year, much like it

THEREAFTER Gusterson's a-

warenesses were dimmed. It was as if a bigger mind were doing the remembering for him and it were permissible and even mandatory for him to dream his way along He knew vaguely that days were passing. He knew he had work of a sort: at one time he was bringing food to gaunteved tickler-mounted humans working feverishly in a production line - human hands and tickler claws working together in a blur of rapidity on silvery mechanisms that moved along jumpily on a great belt; at another he was sweeping piles of metal scraps and garbage down

a gray corridor.

Two scenes stood out a little

A windowless wall had been knocked out for twenty feet. There was blue sky outside, its light almost hurtful, and a drop of many stories. A file of humans were being processed. When one of them got to the head of the file his (or her) tickler was ceremoniously unstrapped from his shoulder and welded onto a silvery cask with smoothly pointed ands. The result was something that looked - at least in the case of the Mark 6 ticklers - like a stubby silver submarine, child size. It would hum cently, life off the floor and then fly slowly out through the big blue gap. Then the next tickler-ridden bu-

man would step forward for procassing. The second scene was in a park, the sky again blue, but hig and high with an argosy of white clouds. Gusterson was lined up in a crowd of humans that stretched as far as he could see, row on irregular row. Martial music was

playing. Overhead hovered a flock of little silver submarines. lined up rather more orderly in the air than the humans were on the ground. The music rose to a heart-quickening climax. The tickler nearest Gusterson gave (as if to say, "And now -- who knows?") a triple-jointed shrug that stung his memory. Then the ticklers took off straight up on

their new and shining bodies. They became a flight of silver geese . . . of silver midges . . . and the humans around Gusterson lifted a ragged cheer . . . That scene marked the beginheard enough about ticklers for ning of the return of Gusterson's

mind and memory. He shuffled around for a bit, spoke vaguely to three or four people he recalled from the dream days and then headed for home and sunper -three weeks late, and as discriented and emeciated as a bear coming out of hibernation

CIX MONTHS later Fay was having dinner with Daisy

and Gusterson. The cocktails had been poured and the children were playing in the next apartment. The transparent violet walls brightened then gloomed as the sun dipped below the hori-TOP.

Gusterson said. "I see where a engreehin out beyond the orbit of Mars was holed by a tickler I wonder where the little guys are headed now?" Fay started to give a writhing

left-armed shrug but stonned himself with a grimace. "Maybe out of the solar sys-

tem altogether," suggested Daisy, who'd recently dyed her hair fireengine red and was wearing red leotards. "They got a weary trip shead

of them," Gusterson said, "unless they work out a hyper-Einsteinian drive on the way."

Fay grimaced again. He was still looking rather peaked. He said plaintively, "Haven't we

a while?"

"I guess so," Gusterson agreed. "but I get to wondering about the little guys. They were so serious and intense about everything. I never did solve their problem. you know. I just shifted it onto other shoulders than ours. No joke intended," he hurried to add.

Fay forbore to comment, "By the way. Gussy," he said, "have you heard anything from the Red Cross about that world-saving medal I nominated you for? I know you think the whole concept of world-saving medals is ridiculous, especially when they started giving them to all heads of state who didn't start atomic wers while in office but - "

"Nary a peep," Gusterson told him. "I'm not proud, Fay. I could use a few world-savin' medals. I'd start a flurry in the old-gold market. But I don't worry about those things. I don't have time to. a bunch of new inventions."

I'm busy these days thinkin' up "Gussy!" Fay said sharply, his face tightening in alarm, "Have you forgotten your promise?"

" 'Course not, Fay, My new inventions aren't for Micro or any other firm. They're just a legitimate part of my literary endeavors. Happens my next in-sanity novel is goin' to be about a mad inventor

- FRITZ LEIBER

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Fearsome the aliens were. Terrible was his plight. But Dr. Goldpepper fought on, confident in the ultimote triumsh of American Dental Science!

Illustrated by GAUGHAN By AVRAM DAVIDSON

DR. MORRIS GOLDPEPPER RETURNS

TAMES E. (for Elphonsus) Dandy paced the floor of the office of his ranch at Tishomingo. the showplace of the State of Texas (and hence not to be confused with any ranch which might be located in or at Tishomingo. Oklahoma), in a manner which can only be described as restless. From time to time he sought like Roethius, the consolations of philosophy - using this word in its former interpretation as meaning "science" - from his bookshelf But for once, the writings of Crowe, Holwager, Barrett, Shields and Williams - not to mention Oliver - for once the writings of these great scientific pioneers

sorb him. His burden was heavy.
His need was great. His pace was
restless.
Some distance away, exactly

how much is unnecessary to state in terms of exact precision, all things (as the great Elinatein has taught us) being relative: what counts as a long way in the State of Rhode Island and Providence Plantations is a mere jaunt in Texas ... some distance away, to continuo, a pretty and personable young person great properties of the providence providen

"But Daddy, Daddy, Daddy!" she pled and implored, "None of

that is 'Little Jimmy's' fault. Why

can't we get married. Daddy. Daddy, please?"

Her name was Mary Jane Crawford The man whom she addressed in terms of filial allegiance was her father. Dr. Clement (or "Clem") Crawford, a landowner and husbandman; in other words, a rancher: besides

holding the éclat of a degree in Dental Medicine. The question instantly and quite properly arises, why was this last fact not mentioned first. and the answer is that Dr. "Clem" Crawford — or "Doc," a familjarity and diminutive which would give justified offense in large centers of populous habitation such as cities, but which in rural areas may be and often is used without offense - "Doc Clem" Crawford had for some

years given over and retired from

active practice of this highly im-

portant profession and had since

devoted his time to agriculture and its allied crafts. "Mary Jane," he said, somewhat testily, "I wish you'd quit all that bawling. I didn't say you couldn't marry 'Little Jimmy', I only said you couldn't marry him now. It's not his fault that 'Big Jimmy' got himself into this pickle. But all he's got in this world is his share of whatever his daddy's got, and it looks like there's a powerful big chance his

daddy might lose whatever he's

not I just couldn't hardly bear to think of my little girl having to rough it, cooped up in some little old ten-room house 'Course you could go right on living here and Little Jimmy' could work for me. But no. He's just as bullheaded as his daddy."

Mary Jane went off, disconsolate and unhappy. Her father continued to sit in his chair, as if brooding over his daughter's affairs, but the fact is that he had unumlcome morries of his own

TN the vast kitchen of the Crawford ranch-house a comely woman of middle age was engaged in baking pies of fruits and other delicious comestibles. This was Mrs. Doothit, the housekeeper, a widow-woman, as the local vernacular idiom has it There had been a time when she felt that she had reason to believe an interest in her existed on the part of her employer, Dr. Clement ("Clem") Crawford - who was a widower — which was separate and apart from such considerations as her flaky and juicy pies, her toothsome steaks, her savory coffee, and delicious roasts . . . though by no means diminished by them.

During this time she thought she was aware of a certain look in her employer's eye, and a certain tone in his voice. But that passed much of Mrs. Doothit's interest in her work. She had even been considering taking a position as housemother in an establishment for underprivileged girls that was maintained in a suburb of Dallas by the Southern Baptist

Convention But she put off making this

decision from day to day. Upstairs, in the spacious suite of rooms generously put at his disposal by his host, Clement (Clem") Crawford, DDM (Ret.), was yet another of the dramatis personne, or cast of characters, of the narration which we now peruse, namely and videlicet one Morris Goldpepper. Doctor of Dental Surgery, inventor of the Goldpepper Bridge and the Goldpepper Crown, and perfector of the Semi-Retractable Clasp which bears his name. He is as it were, the Livy, Macrobius or Gibbon of this annal. (Modesty, epitomized by my automatic shrinking from the spotlight. obliges me - with this one exception — to cleave to the Third Person previously and hence-

The suite of rooms was a veritable apartment of its own consisting of a sleeping chamber, a lounge an office a kitchen a har (which Dr. Goldpepper's wellknown temperate habits rendered about as useful as certain mammalian appurtenances on a boar).

forth)

a games-room and what had previously been another sleeping chamber but which had been converted at no small cost and effort into a laboratory for the fabrication and synthesis of dental prosthatic devices All this had been done out of

pure generosity, affection and respect by Dr. Crawford on behalf of his old Navy Dental Corns "buddy", Dr. Goldpepper.

It is not to be thought that Dr. Goldpepper had surrendered occupancy of his bachelor apartment in the Hotel Davenport, nor vet of his laboratory on Broadway in the Upper West 70s, in order to live the life of a country squire in the sylvan or (considering the sparseness of trees) semi-sylvan fastnesses of John C. Calhoun County, Texas, The facts of the matter, not altogether pleasant, are that he was undergoing the long and delicate process of recuperation intendant upon the aftermaths of his rescue from the grasp and clutches of the malevolent inhabitants of a distant planet in another part of the Galaxy, the captivation and captivity whereon has already been recorded in these pages; anent which, enough - no point in

chewing a twice-told tale. At any rate, Dr. Goldpepper rested in his luxuriously appointed guest quarters. He took long walks around the ranch, delighted in the verdant greenery of its crops and the rolling undulation of its hills. And, for the first time since his boyhood, he recom-

time since his boyhood, he recommenced the gentle piscatorial craft or pastime of angling. The M Bar L Ranch (named after the Honorable Mirabeau Bonaparte Lamar, sometime President of the Republic of Texas,

ident of the Republic of Texas, and a boyhood idol of "Doc Clem") was located on the Little Comanche River. To those used to the Majestic Hudson and the navigable East, the application "river" to what others might well deem a mere creek is at first difficult. However that may be, the waters of the Little Comanche teemed with trout, bass and other edible species of fish. Dr. Goldpepper considered himself too impatient to undertake mastery of dry- or even wet-fly fishing, but his efficient host kept his bait box supplied with worms of a most surprising stature or length and thus aided the guest seldom failed to come home with something in his creet besides air.

IT WAS on the day on which our story opened that Dr. Goldpepper returned from a circumambulation of the senery and was told by his host that someone was waiting to see him. "Waiting to see me?" was his surprised rejoinder. "Who?" "I don't know. "Morry." said

ry Doctor "Clem." "Some little old

Put completely off guard by his awareness of the Texan habit of placing the words little and old before almost any odd noum — a "little old baby," "a little old elephant" or "brontosaurus" Dr. Goldpepper was therefore astonished to see that the personage waiting for him was literally little and — to all outward pressers

But in another fraction of a second he recognized the typical blue gums in the individuals* mouth, open in a fawning sort of false, deceitful smile, and recognized himself to be in the presence of a member of the hideous and alien race whose unwilling captive he had been on far-off Upsilon Centauri (as he had with wry humor denominated it to himself, to avoid becoming emhimself, to avoid becoming em-

Startled, Dr. Goldpepper uttered a cry of surprise. Inadvertently he stepped behind "Doc" Crawford, who inquired, "Morry," what in the Hell is the matter?" Goldpepper lashed out fear-

bittered.)

Goldpepper lashed out fearlessly at the invader with his fishing-rod, but the diminutive alien evaded the blow and groveled on the floor, crying, "Have kindness, Merciful Goldpepper!" and attempted to place his head beneath Goldpepper's foot.

Once it was realized that this was a sign of submission indeed of homege or obeigence and not some sort of wrestling hold the latter at once became calm

"What is the meaning of this outrageous intrusion?" Dr. Goldpenper demanded sternly and outraged. "Is it your intention to abduct me yet another time, as if

I hadn't had enough townis already?" "Assist. assist. Benevolent

Goldpepper!" the alien wailed as he writhed on a floor-rug made from the pelts of fifty-four covotes shot by the owner of the M Ber L. "Forgive, Great Dentist of the America Seizing the unwelcome one by

the scruff of his collar while he was still attempting his act of varieties Dr. Crawford inquired in some amazement, "Do you mean to tell me, 'Morry,' that this little old thing was one of the gang that kidnapped you?"

"It was not by violence, but by subterfuce," said the erstwhile victim, wearily, "And I don't care to dwell on the subject. Ask him to leave."

"'Ask' him?!" Dr. Crawford exclaimed with an oath, opening the door and flinging the intruder out with some measure of violence. He then summoned one of his employees, a tall, dark and ugly man with only one eve. known as 'Oiito' Gonzales, and on whose head there was doclared to be in the State of Chihushus (or it might be Sonors) an unofficial reward of ten thousand pesos. He enjoined the Mexican not to allow the extraterrestrial upon the premises again under pain of severe displeasure. Much shaken by these events.

Dr. Goldfellow allowed himself to be persuaded to take a small class of Bourbon whiskey, and Mrs. Doothit made him some strong onffoo

WHILE the agitation produced by these untoward events had yet to die down, a sound of an automobile was beard outside in the driveway. Looking out the window, those inside perceived the wall-known palomine Cadillac of James E. (for Elphonsus) "Big Jimmy" Dandy, Seated with him was his son "Little Timmy" a perfect example of hyperbole, or exaggeration not intended to deceive, for it was obvious to the naked eye that "Little" Jimmy was at least six feet six inches tall and had an open and pleasant face. It was a source of sorrow to Dr. Morris Goldpepper that cir-cumstances beyond his control

were providing impediments to

the marriage of this young man

to Mary Jane Crawford, of whom

he was very fond (in an avuncu-

lar way, she referring to him as

"Uncle Morry" on occasions of conversational intimacy.) Stetson

The young man waved to them and then walked off with his fiancée, who had run out to meet him. His father looked at them. shook his head and walked slowly

into the house.

"Howty, 'Clem,' " he said, in greeting, "Howdy, 'Doc' " - referring to guest, not host "Anything new, 'Jimmy?' " Dr.

Crawford inquired, As Mr. Dandy slowly shook his head, Dr. Crawford pressed his line together Then he rose. "I've got to tend to some business down at the south forty," he said, "You and Morry entertain one another now, 'Jimmy,' you and your boy stay for dinner, now, hear?" And not desire an occasion to arise for him and his friend to be alone together, doubtless for fear the subject of the postponed nuptials would be broached

Doing his best to make conversation, Dr. Goldpepper inquired. "I wonder why people always talk about the south forty. How is it that a person seldom if ever hears mention of the north forty?"

But Mr. Dandy didn't rise to this intriguing ethno-ecological problem. He merely shook his head in a bemused fashion and said, "G - damn if I know, 'Doc.' " And then he sighed. He was a typical Texas-type

rancher; tall reddened face boots He sighed again, looking at a

mounted portion of a white-tailed deer which Dr. Crawford had, in rather questionable humor, placed over the mantle of the giant fireplace.

"Mr. Dandy - " "'limmy,' 'Doc.'"

"'Iimmy' - forgive me for intruding on your own personal emotional difficulties, but if you won't mind - after all, although not a physician in the common sense of the word - let slone a psychiatrist, psychologist or psychoanalyst (whether Freudianly long years of professional duty before I commenced the more solitary work of dental prosthesis, in my civilian practice as well as the United States Navy Dental Corps I have had natients confide in me all manner of difficulties and - "

Mr. Dandy grouned aloud. "'Doc,' " he said, "do you know anybody who wants to buy fifteen million earthworms?"

THERE was a protracted per-

Dr. Morris Goldpepper was convinced that the man's mind had snapped, thus causing a men-tal abberation of no mean propor-

tion "How do you mean, 'fifteen milcautiously. Delusions of the most multifarious kinds he had met with before, but this was something new

"It's all the fault of that G damn Federal Government," said Mr. Dandy, "If it wasn't for Them. I'd never of gotten in this here predicament. The least they could do is buy 'm off me. They buy surplus wheat, don't they? Butter? Cotton? Goober peas? Why. do you know that last year the Federal Covernment spent over eight million tax-dollars to keen up the price of land?"

"What!" exclaimed Dr. Goldpenner stung to the quick "With my money?"

Mr. "Big Jimmy" Dandy smacked his right fist into his left nalm. "Yes sir with your money! And with my money! But can I get some of it back when I need it? No. sir. Them and their G damn flood control! Why, when I think of it - "

Wistfully, Dr. Morris Goldpepper thought of the perfectly equipped laboratory upstairs, with its neat array of wires of teeth shellac trave plaster dental stone, denture trave, casting ovens and machines Baldor lethes and Bunsen burners. Here he could have been at work on his favorite project, developing the Goldpepper Can instead of listening to the disjointing babblings of

lion earthworms'?" he inquired some backwoods anti-Federalist He sighed

"What is the precise or even approximate connection," he inguired, "between governmental projects for flood control, and the sale or purchase of earthworms?" The rawboned, rugged rancher

looked at him ruefully. "That's right," he said. "You're not from around here. You wouldn't know. Well, 'Doc,' the Federal Government was supposed to start this here flood control project of building dams along the Little Comanche Big Comanche Middle Comanche Muddy Tom Clear Tom and Bullhead River Valleys. which would provide twentyseven new lakes Now, you know, 'Doc.' lakes are pretty scarce in this part of Texas, I don't suppose there's more than one or two a man couldn't, uh, spit across, with a favorable wind behind him.

"So you can imagine what twenty-seven new lakes would mean Twenty-seven lakes" "Hmm," said Dr. Morris Goldpepper thoughtfully.

Every fisherman in Teyas Mr. "Big Jimmy" declared enthusiastically, would flock to the new

Lakes Area, to say nothing of multitudes from other states. It would be the biggest thing since the discovery of oil. "So naturally," he said. "I looked to increase my stock." "Your stock?"

"Yes. On my ranch."

Dr. Goldpepper, who had been thinking in terms of mutual funds, common and preferred, a subject about which he knew little or nothing, not being a speculator by nature, chuckled gently. I see," be said. "Black Angus? Santa Gertrudis? Brahmas?" — terms had acquired from his host.

Clement ("Clem") Crawford, D.D.M. (Ret.). "You planned to sell meat to these visiting tourists? Barbecue? Hamburgers?"

Mr. Dandy cast a most peculiar look upon him, "Do you mean to say, 'Doc,' " he inquired, "that you don't know what kind of critters I

raise on my ranch?"

In the embarrassed silence



which followed they could hear the two young people who were walking by outside. Mary Jane was sobbing all over "Little Jimmy's" silk shirt and had soaked it to a transparency. He was patting her shoulders with his huge hands and saying, "Now, Honey. Now, Honey."

Honey."

"Er — what kind?"

"In Texas, 'Doc,' when they say lim Dandy,' they mean earthworms, And when they say 'earthworms,' they mean 'Jim Dandy.' Simultaneous terms, sir Simultaneous terms, I started out with one worm tub twenty-five years ago and now I've got the largest worm ranch in the State of Texas! And that means in the



world. One square mile of worm pits, 'Doc' - think of that, One square mile of worm sheds worm tanks and worm boxes." He gazed into the far distances, a proud and dreamy look on his seamed face. "Earl B. Shields - vou've heard of Earl B. Shields, everybody's heard of Earl B. Shields — Earl B Shields devotes two whole chapters to me in Commercial Earthworm Raising George H. Holwager's Bigger and Better Red Worms has fifteen illustrations of my ranch. Calls me 's model for all progressive worm ranchers to follow!' What do you think of that? Barrett, Oliver-Crowe. Williams and the others.

they all refer to me, yes, sir,"

Then the look of exaltation vanished from his rugged features. "But I raised my sights too far," he said, "It was the mere thought of them twenty-seven lakes and the folks flocking to all of'm that set me off. What a market for bait worms! And me setting right here in the middle of it, astride the main highway! I advertised, took whole pages in the National Worm Rancher, offered top prices - eight dollars per five hundred for Giants, five dollars per five hundred for Mediums and four dollars per five hundred for Run-of-the Pits Offered purchase agreement quarantees for three years ahead . . " In order to house his new stock.

the enthusiastic rancher had ne erected new buildings. In order to pay for them, he had borrowed. Alas for the vanity of human wishes! (As. Samuel, Dobrson,

wishes! (As Samuel Johnson, Li.D. (Oxon.) called it.) Alas for ambition!

The Federal Government, in

the name of Economy, had canceled the flood control project for the area including the Little Comanche, Big Comanche, Middle Comanche, Muddy Tom, Clear Tom and Bullhead riverine rejons — thus leaving "Big Jimmy" Dandy of the Jim Dandy Earthworm Ranch holding, as it were, the bag.

What right (he demanded)

had the Federal Government to come messing things up in Texas with Economy? If Texans had wanted Economy (he declared) they'd have stayed a Republic. "And so here I am," he assever-

ated, "with fifteen million worms in my pits, and my regular markets can't take no more than a million of "m. "Doc," you see before you a ruined man. My hopes are blasted, my lands are mortgaged and it looks as if Little Jimmy and Many Jane won't be able to get married for years and years, because I just know my boy wouldn't break his deadly's heart by taking on the responsibility and expresse of a responsibility and express of a responsibili

penny. I'd blow my brains out if I thought otherwise, and he knows it: yes, he does,

"Just the thought of all them hungry beauties crawling and wieling in my worm nits and no market a-tell for'm makes me feel raw and miserable in the pit of my stomach I wonder if Mix Doothit baked any sweet notato pie lately. Though I'll take rhuharh-necan if she hasn't."

Doctor Morris Goldnepper declined an invitation to join the rancher in the kitchen, and, on the terminologically inexact plea of a headache, withdrew to take another long walk in the country.

WITH one part of his mind Dr. Goldpepper mused upon the problem of the Goldnepper Canfor so many long years his perpetual Work In Progress should it be, for example, reticulated or non-reticulated? - while simultaneously with another part of his mind he brooded over the question of "Big Timmy." "Little

Jimmy" and Mary Jane. Almost before he realized it he found himself upon a sort of a high mound or hillock, from whence he had a view of much of the property belonging to his friend Dr. Crawford, Everywhere the green verdure grew - except on the hillock, which was dusty and arid and nourished (if that is not too strong a word) only a

handful of sickly and economically valueless weeds. A scrabbling sort of noise

caught his attention, and he turned to observe the identical alien from Upsilon Centauri who had earlier been ejected from the property, in the current act of kneeling and pouring handfuls of dust on his head with both hands. "Abject I am, Great Goldpep-

per," he wined, "Abasing myself before you in humility I am On behalf of my people apology offering I am Forgive forgive. Compassionate Goldpepper!"

At first Doctor Morris Goldpepper resolved to sell his life dearly. But the thought occurred to him that this creature from another galactic quadrant might just conceivably be telling the truth Furthermore, his curiosity

"What are you doing here?" he inquired. "On the terms of the peace treaty signed between your planet, the American Dental Association and the Waterfront Workers Union (acting through their representative, Mr. Albert Annapollo, and the Longshoremen's Dental Health Plan who acted as our shock troops -I was to be released from the captivity wherein I toiled making false teeth to enable your naturally toothless race to pose as Earthmen; and those of you on this planet were to leave instanta,

was piqued.

on pain of having your planet's water fluoridated without mercul Therefore I must beg to inquire what you think you are doing here?"

"The elightest trace of fluoring to us instant death is Life-lowing Goldpepper," the alien sniveled.

"Have ruth!" Touched despite himself, Dr. Goldnenner magnanimously directed him to speak without fear This the non-terrestrian lifeform (his race had two hearts, and six distinct and articulate digits on each hand and foot) proceeded to do

"Since you from us taken were great calamity upon us has come Auspicious Goldnenner." mouned, "Assist, assist!" *What seems to be

trouble?" "Overnopulation." Somewhat stiffly, Dr. Goldpep-

per pointed out that he was not Margaret Sanger. "Malnutrition! The soil of our home world for cycles, sickening

has been. Woe. woe. woe! Our stricken planet aid. Scientific Goldpepper!"

In a précis or nutshell, the story he told was that, as a result of some curious condition of their planet's soil itself, the slith cropsource of their staple gelatinous food, had failed by forty per cent. and was still failing. Purts, the prime source of gruel, had dropped to a mere twenty per cent of normals and as for enast leutah and zooky, the nutritive elements of which were scantier, it was doubtful if the grops would reach maturity The soil chamists of Unrilon Centauri who were as advanced, probably, as our own, had propounced themselves haffled Large areas had been enrayed with Kr Pf Kr to no avail and larger ones irrigated with spure without the slightest results.

"Once our whole planet like that looked," the spokesman wailed, "Now, like this it is." He gestured from the greenery on all sides to the sterility of the hill. or undulation, on which they stood; and he stooped to cast

more dust on his head. As Doctor Goldnenner followed his gestures he observed one of the rench-hands coming their way. and indicated, by waying his hand, that he desired this man to come

"'Doc' seens you're here." the man said, coming up to him, "I got thishwere tush that's been givin me Hell, my face is all swoll up, and I been livin mostly on beans an beer. See?" And he obtruded a dusty finger into his mouth to indicate the offending

canine. "Come to the ranch-house when you can, where I have my instruments, and I'll take a look at it."

if you will pardon my curiosity. why is this particular hill so desolate, compared to what I might call the lushness of the rest of the ranch?"

The man withdrew his finger, sucked meditatively on the tooth and then said, "Why, how the land looks hyere, that's how all thishyear land use to look twell we got in them Jim Dandy Giant Golden-Red Hybrids. Now, evva othuh bit a land byere is green an growin. We keeps thishyear little old hill seprut just fer showin what it oc'ul use to look like; will it hurt much, 'Doc?' "

And in this wise was Dr. Morris Goldpepper reminded of the singular and curious ability of the common earthworm - let alone the Jim Dandy Giant Golden-Red Hybrid earthworm - to rejuvenate a piece of ground by moving through it, and by moving it through them. "Disgusting subject," some might say, but to Dental Science nothing natural is disgusting: thus cogitating he returned to the ranch-house, followed by the Upsilon Centaurian. just in time to catch "Big Jimmy."

A MERICA'S leading worm A rancher was loath to believe that the alien was from another planet, but, upon being assured and reassured that he was not, at any rate, from the Soviet Union. he professed his complete willingness to do business. After all, it is not every day in the week that one finds a customer for fifteen million earthworms.

However, the term "customer" implies not only sale, but purchase as well. Purchase may be by cash, goods or service. Cash. it was obvious, the Upsilonians did not have. The only service of which they were possessed which was at all likely to be of use was that of teleportation (matterporting according to another usage); and it was agreed that this was something for which the world was not yet prepared. Which left "goods."

the crops of his native world should be restored to their former vield, to pay for the worms. pound for pound, in slith, purts, sneet, kutch and/or zooky, But on being informed by Doctor Morris Goldpepper (who had lived on these substances and their derivatives for months) that the best of them tasted like old library paste Mr. Dandy declined. He also eructated.

The Upsilonian offered, when

"Pardon me, folks," he said, abashed and discomfited, "It's a sort of nervous indigestion, which

I get every now and . . . What in thee Hell are these?" "These" were a number of objects in a small box offered by the alien Upsilonian, apparently the same bulk as a five-grain aspirin tablet, but shaped rather like

tiny pretzels.
"Minor medications of my

planet, they are," he said. "For ailments of stomach, colon, freest and grunk, good they are. Take, take, Worm-Raising Dandy."

He took and while he wee

He took, and while he was swallowing. Doctor Crawford asked. "They good for anything

che?"
The Upsilonian reflected. "Arhritis," he said, after cogitating
thoughtfully. Doctor "Clem" aowed himself as irregular victim
to what he thought might be arthritis, in his left knee, and swallowed one of the pillular pretzels
before his colleague could point
out to him that this was all a

out to him that this was all a highly non-scientific approach to a highly scientific problem. It was at this point that "Little Jimmy" came in and reminded his father that they had fifteen million worms to take care of and hence for that reason couldn't

stay there all day and all night, much as he ("Little Jimmy") would personally prefer to do. The muffled sound of Mary Jane sobbing outside was audibly heard when he paused, reluctantly.

ly.

His father rose. "Boy's right,"
he posited "Well, I guess I'll have
to come back tomorrow and continue the discussion. I sure do
hope we can think of something.
Bye." And they drove off in the

pelomino Cadillac, and then Doctor Goldpepper had to treat the ranch-hand with the infected tooth. It was a root-canal job, but, with the able if reluctant assistance of his colleague, was successfully accomplished.

Everyone retired to bed rather early, including the Upsilonian. "I believe I'll take another one of those doo-hickeys," the host observed, as he prepared to go

served, as he prepared to go upstairs.

"Has your arthritis been bothering you?" Dr. Goldpepper in-

quired solicitously.

"No; but why take chances?"
was the rejoinder. "Night, 'Morry.'
Night, Mary Jane. Night, um."
Mary Jane sniffled.

THE NEXT morning found Doctor Morris Goldpepper sipping his pink grapefruit juice (for which fruit Texas should be more famous than it sis with only Mary Jane for company; and she had nothing to say except an occasional semi-stifled sob.

Before he had finished the job, the Dandys drove up, Mr. Dandy, Senior, bounding into the break-fast-nock (it was as big as the Grand Ballroom at the Hotel Davenport) with his red face full of beaming joy. "It worked!" he cried — a noise which produced the Upsilonian on the scene. "Big Jimmy" picked him from his feet and deced second the room with

him, "It worked! Settled my stomach like it never was settled before! It's just got to be good for arthritis, too! I figure half the nonulation of the United States has got nervous stomachs, and the other half has arthritist Mr. Upsilonian (say, are you Armenian? I've known some real fine Armenians!). I'll take seven and a half million white ones, and seven

and a half million pink ones, a worm for a pill. A deal?" The alien was too startled to do

more than nod Dr. Crawford came down at that moment, "Mary Jane, honey," he observed, "you trot right out and give your sweetheart a real big good-morning kiss, hear? And

tell him that the wedding is on!" The delighted girl rushed, squealing merrily, from the room. and her father in a lowered tone of voice winked and due the other Earthmen in the ribs with his elbows, as he observed, "I found something else that those nills are good for! Why, good morning, Lilybelle!"

Doctor Goldpepper, on the point of asking what else, looked up to see who "Lilybelle" might be, and lo and behold, it was no other one but the comely housekeeper, whom he had never heard "Clem" address other than as "Mrs. Doothit, ma'am," before. She blushed, and her eyes, before she cast them down, sparkled.

"Hmm," observed "Big Jimmy," adding, "Well I guess now we know what 'freest' means. Or maybe it's 'grunk.' Tell them factories to start gearing for increased production! Vip-pay!" "Fe-vih-hoo!" cried Doctor Crawford

The alien said nothing, 'but genuflected and kissed the cuffs of Doctor Goldnenner's trousers. How Upsilon Centauri was

saved from soil sickness and famine, how the Iim Dandy Ethical Drug Company of Texas, Inc., moved with the speed of light into the ranks of the great corporations along with its sister-syndicate, the Jim Dandy Giant Golden-Red Hybrid Earthworm Company; how James E. (for Elphonsus) Dandy, Jr., married Mary Iane Crawford at the same double cere-

mony which united her father in matrimony to Mrs. Lilybelle Doothit, are matters too profuse in content to be recorded here by Doctor Morris Goldpepper, now restored once again to health and duty: who, desiring only the good and welfare of the American Dental profession and the human race, is glad to go down to posterity merely as the inventor of the Goldpepper Bridge and the Goldpepper Crown, and perfector of the Semi-Retractable Class which bears his name.

DROOZLE

JEAN LANNI could see that his girl friend, Judy Stokes, thought it was the lamest excuse she had ever heard. If your ball-point pen work write as you want it to, your life doesn't stop, she probably was thinking. You just get yourself another pen—You don't call off a marriage...
Skeptically the girl with the

long, golden red hair pointed at his breast pocket. "This Droozle I must see. And who's that other member of the partnership there beside him? An Eversharp pencil named Blackie?"

named Blackie?"

"No, that is the other end of Droozle. Permit me to introduce you." Blandly the tall, young artist slid Droozle from his breast

Droozle was probably the greatest writer in the world any world!

By FRANK BANTA

pocket, straightened him from his U-shape and handed his twelveinch pen to her.

"A snakel" she shricked. "What else?" "Why, I thought those ruby

eves were jewels! I must have squeezed right up against him when I kissed you," she cried indignantly.

"You did. I felt him squirm a little."

"Oh! And here I thought it was your heart beating wildly."

"Well, maybe it was. It does that sametimes" "Let's try again, And this time hold your snake behind you." The long-legged girl stood on tiptoe to

reach him

"It was your heart beating wildly," she decided a moment later. "Which makes me think you might not just be trying to get rid of me by a silly excuse."

"Believe me. I'm not." he urged, "Droozle is the key to all

my fortunes." "All right, tell me about it. But first tell me where in the universe

you got him." "Oh, that was just after I graduated from art school. I was on my grand tour. We had an unexpected stopover at the Coffin planetary system. I discovered ballpoint engker are the chief export of Coffin Two When we lifted ship. I had acquired my

little puppy snake, Droozle," "Is a puppy snake like a puppy dog?" she asked, fascinated. "I mean, do they have their little domestic troubles such as the cells of nature?"

"Oh he was thoroughly pocketbroken before I acquired him But he did like his little jokes and I learned to leave him curled up in a circular ashtray until maturity sobered him."

WELL, I should say! You drew sketches with him.

didn't you tell me?" He nodded. "At first he only had one color of ink-red-and if I sketched with him all day he would commence to look wretchedly anemic. He took two days to

refill normally But I could use him again in only one day's time provided I didn't mind the ton three-fourths of my non laying on my arm."

"I hope his weight didn't get tiresome" she commiserated holding in her amusement.

"I coped somehow," he answered sturdily. "Later he learned - after I squeezed him on the

liver a few times just to show him how - to switch to a lovely shade of other, which was delightful on pale green or pink paper. Why, what's the matter. Judy?" "Go on," she choked, "Go on

go!"

He beamed, "I write my letters with him too. Every day I wrote with him, first in red, and then in ochre to give him a rest. He seemed to love to write more than to sketch. He would jump into my hand with tail happily pointed downward as I sat down to my writing desk. And when I later saw his dark green stripes turning pastel and knew that anemia was imminent, and started to lay him down for a carned rest, he would stiffen himself as if to say, 'Oh,

come, come! I'm good for half a page yet!" "It sounds as though he was a willing worker, but I still can't

see why his mulfunction makes our marriage impossible." "I haven't gotten to his career as a novelist yet. There lies the heart of the tragedy."

"Please proceed to the heart of the tragedy."

44 T all began when I found him arched up one morning, writing by himself—with difficulty, it is true. His first message to the world was, 'I hold that the supine viewpoint is seldom down-

"I don't see how he could stand up on end to write for very long even with such a magnificent philcemply to belster him."

"What a terrible pun," Jean groaned. "He couldn't stand up very long at first. But I saw he had talent. I gladly learned the skill of holding him upright in a relaxed manner so that he could express himself on paper. In no time at all, he had written what was to be his first, sensational, best-selling shocker, Naked Bellies in the Grass."

"That does sound sensational."
"Not for snakes. He neglected to mention his characters were snakes. I Fang You Very Much followed swiftly afterward and was just as successful. Mothers were amused with its lispy title

were amused with its lispy title and got it for the children." "Sounds like a story with some meat in it."
"Yes! Something you can get

your teeth into. However, his next offering, A Snake Pit Full of Love, was by far the topper. It was banned in Boston."

"You haven't mentioned anything tragic so far," she observed. "In fact, you have made a pot of

money."

"Right. After my snake had filed his income tax returns, we still had enough money to purchase this house and to support us for a couple of years. The only trouble is, his royalties have stopped coming in and that money is all used up. I still money is all used up. I still

haven't been able to sell any of my landscape paintings. So we haven't any income, and that's why you and I can't marry for a long time yet—if ever!" Her exquisite brows wrinkled with concentration. "I don't understand. Has Drocale written

himself out?"
"Far from it," answered Jean, seating himself and parking Droozle on his knee. "He's writing more than ever."
"The quality is some, then?"

Jean shook his head. "No, he's writing superlatively."

"Then what is the problem?" she asked, now thoroughly mysti-

"He's writing classics!" burst out Jean in baffled irritation. "He won't write anything else! Easily seeing the approaching catastrophe, I wrote long persuading essays to him. It was pathetically useless. Proudly he continued to write his Rise and Fall of the Western Plainsman in a lucid, passionate prose which would evoke an imperishable picture but in three thousand pages."

"I think classics are nice," protested Judy, "and one of these days I'm going to read another

one." Huskily Jean told her the worst. "Writing classics consumes paper by the top. And if you ever get your 750,000 word story finished, you must then start shrinking it back to an acceptable 75,000 words. This is a nearly hopeless task. Of course if you can get it back to 75,000 words the digest magazines will have no trouble shrinking it to 15,000 words or fifteen pictures, and you then get your fingers in the till." He paused and all hope fled from his face. "Droozle won't live nearly long enough to get all of that shrinking done. And in the

meantime that scribbling snake is writing me out of house and home!"

"Are you going to let him get away with it?" the girl challenged.

44T DON'T know whether I am or not," replied the young artist, looking worried. "I thought I had the problem solved at first He got so sassy when we were arguing about him writing classics that I had no hesitation about applying a pinch of glue to his glitt.

the tering little extremity. That put cid, him out of the writing business until he came to terms."

"Well, now. You were enterprising!" she approved.

"It didn't do any good though," Jean grumbled despondently, bowing his head.

bowing his head.

"He wouldn't bargain?" she
asked incredulously.

"He didn't have to. He knew right where the cheese grater was."

"Ooh!"

"My sentiments exactly. But I don't know what to do with him

now."

"You're all out of ideas?"

"Oh we could sell this house
and move down to skid row where

and move down to skid row where the rents are cheap," he flung out airily, but quite plainly worried sick.

"Twe got a much better idea

than that," she said cheerily, getting a pad and pencil from her red handbag. "How about giving Droozle this ultimatum?" As Evote, Jean wrote, Jean read over her shoulder, "Suggest you begin writing fiction pleasing both to you and your master, or we shall be forced to hand you over to the doe

catcher!' "

Jean drew back amazed. "Why,
we would do no such thing!"

"I know it, silly. I'm just negotiating."

"No." he grumped, ready to be

angry with her. He got up and

strode around the studio. "The dog catcher! We will not lie to that gradu!"

Judy dropped the idea, "Tve just now thought of another one. Here's an ultimatum we could give him and mean it, too. No more writing until we reach an agreement, or we will take away all his writing paper and reading

all his writing paper and reading matter for good!"
"I'd thought of doing that,"
Jean conceded. "But isn't that a monstrous way to treat a literary

genius?"
"Not at all!" she protested. "By
taking on a work that will require more time than his lifetime,
he is defeating himself."

"There's that way of looking at it," agreed the artist. "All right, Droozle," he called. "You heard us talking and you know we mean it. No more writing until we reach an agreement—or else!"
Droozle quit writing at once.

While the girl and the young artist watched anxiously, Droozie first wandered about uncertainly for a few minutes and then curled up on a newspaper and went to sleen.

He slept all evening.

44HE has beaten us again,"

Jean Lanni told Judy

Stokes resignedly when she arrived at his studio the following
evening. He watched Droozle fascinatedly as the snake moved his

restless tail over the margins of newspapers spread on the floor. "He doesn't know yet that I know. I discovered the fraud only by the merest accident."

"He isn't writing?" she asked, perusing the newspapers for signs of Droozle's elegant script.

"He most certainly is."
"Where?"
"Look at him!" Jean exclaimed.

ignoring her question. "He's doing it again!"

Droozle had ceased wriggling

Droozle had ceased wriggling for the moment and lay there shaking violently, as though he had malaria. Then the paroxysm passed and he took up his restless

passed and he took up his restless movements again.

"The poor genius," mourned Judy. "He must be sick with frustration"

"Sick, my eye! That snake has learned to centrifuge part of his blood while it is in his body, so that the hemoglobin is separated out. The result is—invisible ink!"

"Why, I'll tell that Droozle off!"
raved Judy. "Here I sat feeling
sorry for the little crumb!"
Droozle did not mind. While
she ranted, he brazenly began
writing in visible ink once more.

"How did you eatch him at it?" she asked.
"I used a piece of his news-

The heat turned the invisible ink brown." ately, looking down at the writer. "you know your master is in great need of funds. Where is your sense of loyalty and self-sacrifice for the one who has cared for you?"

Droozle wrote poetically, "Is there Toy or any other good thing in Abnegation? Is there Beauty in Sacrifice? What Handsome purpose do these serve a being in his race with Time? His Days will soon be spent and they will come no more: thus my Criterion: Is This the most Joy gathering, Awareness touching, Beauty sensing act of which he is capable? None other is worthy of his time!"

"Men are not so selfish," objected Tean. "I am not a man," wrote Droozle simply.

Jean turned staunchly to the girl. "Judy, he has convinced me. I have been wrong about him. From now on he can write whatever he likes"

"Good-by to our hopes then?" "For the present, yes" assented Jean stoically, as he brought fresh sheets of paper from his desk for Droozle, "My landscapes might begin to sell after a while," he added without conviction.

"Rotten little crumb," Judy fumed, glaring balefully at the snake. But Droozle wrote serenely on, his ruby eyes clowing enigmatically

Jean interposed magnanimously. "I see now that I have been inexcusably selfish with Droozle. I've kept him cooped up here not wanting to bother with him while I was out on my painting trips. True, he was busy writing. But most of his knowledge of Rarth has come from books; he can't write classics about living things unless he sees living things."

A S she picked up his trend of

A thought, Judy's face lost its resentful expression, and something like scraphic righteousness spread over it. "I see what you mean. Just how did you plan to make up for this shut-in feeling that poor Droozle must have been suffering so much from for all these years?"

"Oh. Judy. I'm so glad you asked mel" He threw wide his arms to the world. "Out into the wind and the rain we shall go, and there I will draw my pictures while he observes: then into the roaring, brawling tayerns we shall go, where life thrives in all its

abundance. I've been robbing him by shutting him up here." "Jean, look at Droozle," the girl exclaimed, pointing, "He has

stopped in the middle of a page and is starting on a fresh one." Droozle wrote, "Please not out into the wind and the rain. Please not into the roaring, brawling

tayerns where life thrives in all its abundance. I loathe shudder and

tilt."

monished the artist "Things are not nearly so had as they used to be anyway. In all justice, shudder and tilt requires far less body-English than its ancestor, rock and roll."

Droozle argued carefully, "You will recall I heard some of it once when you took me into a particularly dirty har over in the west end of town. I feel, as a result, that I have observed this type of data to the extent that I can write of it competently without further study."

"Oh, but that was months ago,"

enthused Iean "The tunes have

all changed by now New nows appear on the tapes every week. You have missed countless sockeroos already, being cooped up here. You will bless me, once you get accustomed to the realities of life - see if you don't. Heigh-ho the wind and the rain!" The snake shuddered "Careful, you'll centrifuge."

Judy warned. Jean added reflectively, study-

ing the ceiling, "Day by day, month by month, year by year. the reality of everyday existence etches deeply into our consciousness, if we will but have the fortitude to expose ourselves to it." Droozle unavoidably centrifured this time, but did manage,

with laborious lateral movements.

the plasma again.

"Loathing is no reason to turn to mix the hemoglobin back with away from reality. Droozle," ad-He complained. "It is cruel of

you to condemn me to this ugliness. I want only to read my books and hear a few simple fugues by Bach."

"It is not cruel. You will have exactly the same existence I have

chosen for myself as an artist. It is fundamental that if you are to write serious literature, you must rub your nose against the realities of life " Droozle wriggled unhappily for

a moment. Finally he wrote. "Actually my writing may not be as serious as the title implies. Misunderstandings conceivably arise over titles. Instead of The Rise and Fall of the Western Plains men, how about changing it to

Those Lowdown Scaly Rustlers?" "That's really getting down to earth," cried Jean, concealing his elation, "But if you aren't going to write serious literature, who will I get to go on my painting

trips with me?" "Take that female of yours." suggested Droozle, "If she refuses to go, inform her that we shall be forced to hand her over to the dog

"Do you suppose he means that?" wondered Jean.

catcher"

"Of course not, silly," said Judy, bright-eved, "He's only negotiating."

- FRANK BANTA

Pluto has alwoys been o puzzle to ostronomers and here is one answer!

PLUTO DOORWAY TO THE STARS

By GEORGE PETERSON FIELD

PLUTO, the outermost planet able to obtain a few facts about of the solar system, was the planet, but what is frustra-

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If of the solar system, was named after that dark, mysterious stranger, the Greek god of hell. The name is apt, for this dark, mysterious planet has had the astronomers living in their own private purgatory ever since its existence was first deduced. The astronomers have been

ting them is that by using these hard-won facts they can easily prove that such a planet cannot exist! But, despite all their theories, that baleful yellowish speck of light continues to glare down the telescope at them as if to say. "Woord Guess again."

It all started back in the 1820's when it was found that Uranus was not following a smooth elliptical orbit, but was staggering through the sky like a drunk. It was finally guessed that the errotic behavior was due to another planet still further out Two mathematicians tackled the problem and independently calculated the orbit, position and mass of the hypothetical planet. With the position in the sky known, it was a simple matter for the astronomers to find the new planet, Neptune, which till then had been overlooked. As soon as Neptune was discovered. the orbit of Uranus was recalculated and this time the observations fitted perfectly - almost. There were still small differences between the predicted and the

Spurrel by the success of the previous work, Professor Perical Lowell thought that there might be another planet still further out. He calculated that it should be four thousand million miles out from the sun, moving in an unusually elliptic; orbit with a period of 280 years, and it should have a mass akt times that of the earth. The same figures were later obtained by another prominent astronomer, Professor W. H. Pickering.

actual positions.

An object this large should be easy to find, so in 1905, Professor

Lowell sat down at his moderate sized, but adequate, telescope and started looking. He died without finding it. It was there, but it was much fainter than it missed it. The astronomer? private purgatory had started. Later searches with photographic plates also missed it, although it was photographed twice. Once it was masked by a bright star, and the flaw in the nexative!

IT wasn't until 1930 that Pluto was found. The radius, eccentricity and period of the orbit were almost exactly as Lowell had predicted. Because the orbital calculations were so closely verified there was no reason to doubt Lowell's prediction that Pluto had a mass of six times the earth's mass except that the size of the planet was impossibly small. It was so small that it still looked like a point through the telescope. It wasn't until 1950. using the 200-inch Palomar telescope, that Pluto's diameter was measured. It was roughly 3600 miles, or about as big as Mercury. This would make the density of the planet hundreds of times greater than water! The earth is only 5.5 times denser than water and osmium, the densest known material, is only 22 times denser. Thus Pluto seems to be made of

collapsed matter, except such matter should only be stable in the interior of dwarf stars. Such a planet should not exist. But it does!

The astronomers have tried everything in an attempt to make sense out of what they know, including fudging the numbers a little. There have been suggestions that Pluto is a very smooth sphere covered by large methane oceans, and the small observed diameter may be due to specular reflection. (There was a similar effect present with the Echo ballon.) But there are slow variations in the intensity, indicating that Pluto is rotating with a day of 154 hours, and one would expect rather sudden changes in intensity from the specular reflections. The other unusual thing about Pluto is its orbit. The orbit is so egg-shaped that it actually passes inside the orbit of Neptune, so that they would at various times in the past and future pass very close to each other. The astronomers feel that, due to perturbations from the other planets, it is improbable that Pluto has been in its present orbit for more than 200 million years. This is only a small fraction of the age of the solar system; so apparently

Pluto is a stranger which arrived

in its present orbit from other

There is one other nagging feature and that is the breakdown of Bode's Law for Neptune and Pluto. Bode's Law is an empirical formula for the orbits of the planets and the reason for its acceptance is best shown by the following table:

	Radias	Actual
	Uning	Ortotal
	Rode's	In A. V.
Mercury	0.4	0.387
Venus	0.7	0.723
Earth	1.0	1.0
Mars	1.6	1.524
Asteroids	2.8	2.8
Jupiter	5.2	5.2
Saturn	10.0	9.54
Uranus	19.6	19.2
Neptune		30.0
Diviso	20 8	30.5

(Note: Bode's Law does not predict a planet in Neptune's orbit.)

There is obviously something wrong out past Uranus. It is as if Plute had come alons, inter-

acted with Neptune and pushed it into an inner orbit, usurping its proper place in Bode's Law. A very weird planet indeed. What we actually know about Pluto is very little. But this little bit that we know points out that it may be very profitable to learn more about it. In the coming decades, as the Orbiting Asto operation and man ventures to to operation and man ventures to be outer planets. we will get to

regions of space.

know it better. But until then it is interesting to speculate.

ONE of the most spectacular possible solutions to the mystery is to assume that it really is a visitor from outside the solar system. Not just a wandering frozen planet that hapnened to be collected by the sun long ago in its wanderings through space, but a device, a "gravity catapult" made by intelligent beings and placed in orbit around the sun . . . a "gravity catapult" being a generator of gravitotional fields that is used to accelerate spaceships to velocities

near the speed of light, It has only been recently realized that such a "gravity catapult" could exist. We can describe how it should be made, but we couldn't even begin to construct it with our present

technology. It has long been known that Einstein's theory of gravity predicts many unusual properties of gravitation. These effects are not well known since they are unobservable with our presently available instruments. So there was little reason to talk about them. The most interesting effect is that a rotating mass, such as a planet, not only attracts an object toward it with its regular gravitational field, but it also "drags" the object around it in the same direction as its rotation Thus a spaceship in orbit near the earth is helped along in its orbit by the earth's rotation. In order to have any appreciable dragging effect on a space ship. a rotating planet has to be very beavy, and rotating rapidly; also the spaceship should be as close as possible to the planet's center. This calls for planets with high density, since they have all their mass concentrated in a small radius and the spaceship can get close to the center without hitting the surface. Using these ideas of Einstein.

we can envision how such a gravitational catapult could be made. It would require a large, very dense body with a mass larger than the earth, made of collapsed matter many times heavier than water. It would have to be whirling in space like a gigantic, fat smoke ring, constantly turning from inside out.

The forces it would exert on a nearby object, such as a spaceship, would tend to drag the ship around to one side, where it would be pulled right through the center of the ring under terrific acceleration and expelled from the other side. If the acceleration were of the order of 1000 g's then after the minute or so that it would take to pass through the velocity of the ship on the other side would be near that of light. The amazing thing is that because these are gravitational forces, a person in the space ship would feel nothing. He would actually be in free fall all the time! This is because gravitational forces act independently on each atom of the body at the same time and give each atom the same acceleration. Because there are no differences in motion of different parts of the body,

there is no feeling of weight.

A network of these devices in orbit around interesting stars would allow an edvanced race to have an energetically economical method of space travel. Because, even though the ring would whird the star of the star o

massive object, so to make sure that it can be used for more than one direction, it would be set to cartwheeling slowly (say with a 154 hour period?) so as

to cover all parts of the sky.
Such a device could even be
made elsewhere by some unimaginable technology and shot
through space by a much larger
device. It could halt itself by
pushing against a massive planet

pushing against a massive planet (such as Neptune?). Maybe when we get to Pluto,

we will find a small artificial satellite around it. Inside will be a message from the Galactic Federation welcoming us to its membership now that we had interplanetary flight, and presenting us with the gravity catapult for our use until we know enough to make one ourselves — a sort of "coming our" present!

- GEORGE PETERSON FIELD

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GENERAL MAX SHORTER

Ta spread Mankind to the stars carries a high cost in lives and not all of them are human!

By KRIS NEVILLE

Illustrated by GIUNTA

MIRACASTLE: The initial landing had been made on a flat plateau among steep, fore-boding mountains which seemed to float through briefly cleared air. In the distance a sharp rock formation stood revealed like an etching a castle of iron-gray stone whose form had been carv-

ed by alien winds and eroded by acid tears from acid clouds. Far above was a halo where the sun should be. The sun was an orange star only slightly larger than Sol and as near to Miracatle as Sol to Earth. The orange rays splintered against the fow and gloom was perpetually



upon the dark face of existence.
This was the first two-stage
planet man had ever attempted
to colonize. Miracastle was so far
from Earth that the long ships
were destroyed twice to reach it.

THE technicians came, commanded by General Max Shorter, sixty-three years old. Men wearing the circle whose diameter was etched in ruby steel enclosing a background of gleaming ebon — the emblem was a silver D. over a suphers of hem.

The surface of Miracastle roild with unfamiliar storms and tornados and hurricanes. Before these, the films of lichen evaporated into dust, and the sparse and stunted vegetation with ochre foliage turned sear and was powdered by the fury in the air. Earth equipment, alien to the

mered gold.

orange sun, hammered into the heart of Miracastle. Night and day it converted the pulverized substance of the planet in the white-hot core of its atomic fur-

naces.

Acid rivers snapped at the wind and changed to salt deposits and super-heated steam. In the gaseous atmosphere, neutral crystals formed and fell like powdered rain. Miracastle heated and cooled and shivered with the virus of man-made chemical reactions, and the storms acreamed actions.

and tore at the age-old moun-

Inside the eternal, self-renewing Richardson domes, the technicians worked and waited and superintended the computers which controlled the processes

raging beyond them. The long ship lifted steadily and majestically through the battering storm and the driving rain of dust and crystals. Out beyond the dense space that surrounds all stars, the long ship probed the ever-shifting currents in the fourdimensional universe. The long ship found a low-density flaw. where space could hardly be said to exist at all. The long ship, described mathematically, was half as long as the continuum - the length being inversely proportional and related only to mass. Time was but a moth's wing be-

tween twin cliffs of eternity.
Inside Miracastle's orange sun,
at its very core, an atom of hydrogen was destroyed completely; and in the inconceivable distance, an atom of hydrogen
appeared. The pulsing, steadystate equation of the universe
maintained its knife-edge and inmortable. The hardenesse's bal-

ance.

Inside the long ship, a pilot-machine ordered the destruction of a vastly greater collection of matter. The atoms of the ship and the sailors — fixed in rela-

tionship, each to each-imploded into nothingness

And the long ship and the men aboard it were born again at a low-density area a million light years away - halfway to Earth.

Born and were destroyed again. in the blink of an eye. Beyond the ship now lay Sol. pulsing in its own warmth and

warming its children embedded in the cold and distant texture of the universe. The sailors were ghosts come home. Miracastle was alone with her

conquerors. CENERAL MAX SHORTER,

a few weeks later, began writing a diary. "I have been Destroyed thirtyseven times during forty years' service with the long ships," he wrote. He wrote with a pen using

a metal straight edge as a line rule. "I have served faithfully and I believe as well as any man the Corps, the planet and mankind, It is perhaps appropriate at this time, as I approach the end of my long service, to record a few

observations which have occurred to me during the course of it as well as to record the day-today details of my present command." The general wrote: "A man is given a job to do. And when all

important thing in his life: to do his job." It took perhaps ten seconds for the soft knock to penetrate his

concentration. He adjusted himself to the moment and closed the diary softly. He deposited it in the upper right-hand drawer of the writing desk and locked the drawer.

The knock came again. He arranged his tie.

"Come in," General Shorter egid. The agitation of the man in the

doorway was announced by the paleness of his face. "Come in, David." General Shorter said, rising politely from the writing desk, "Be seated, please."

"General, we've had a . . . a very unfortunate thing happen on the shift." The general sank back into his

chair. Light from the desk lamp framed his expressionless and immobile face, half in light, half in shadow. He fingered the straight-

edge on the desk top. "Sit down, David, and then tell me about it." Shift-Captain Arnold moved

uncertainly. "Sit down, sit down," General Shorter repeated impatiently, Captain Arnold seated himself

on the edge of the chair. "One of the men," he said, "just committed suicide. He was

is said and done, that is the most

in charge of the air changing monitor this shift. He went outside without a suit."

The general blinked as though to remove an irritation from his eye. His hand lay still and hard upon the straight-edge. "What was his name?" he asked in a voice that was vaguely puzzled. "Schuster, Sergeant Schuster.

sir."
"Yes, I remember him," the general said. "He came to us about a week before the lift. I think he was from Colorado. He had very broad shoulders. Short and broad Neat annearing. Unit.

form always in good order."

General Shorter ran his thumb and forefinger up the bridge of his nose and then, with a very small sigh, placed his palm over his eyes.

"Draw up the report," he said.

"Was there a final message?" The question was uttered without hesitation and was followed by a moment of silence. "No, sir."

"No, sir."

General Shorter's breath was audible.

"Please feel free to smoke.

David."
"Thank you, sir, I don't smoke."
"No, of course not. I'd forgotten." General Shorter half turned
and placed his hands on the desk.
He stood under their pressure.
"What would you say to a
heandy?"

"I should return to duty, sir."
"A few minutes more," the general said. "The brandy is good."
He moved into the shadow and sorted bottles at his tiny cupboard. "Here." He held the glass to the light. Amber liquid flowed softly and the general handed across the half-filled glass. "Sit back." he said. "Til ioin you."

Glass in hand, the general stood with his back to the light. He seemed surrounded by cold fire, and the glass sparkled as he lifted it. He sipped. "Try it, it's

"It's very good, sir."

FOR a moment neither spoke. Then the general said, "This isn't my first command, you know. I've seen men die. I've had to take chances with them occasionally. You could say, I suppose, that I ordered some much object the said of the s

The sentence ended as the glass alipped and fell. "Tm sorry," he said, looking down at the sparkling fragments at his feet. The dark liquid — the light gave it a reddish cast — puddled and flowed and its aroms filled the room. "No, no. Let it be, David. "Ill set it later."

The general went to the cup-

board and poured into a new glass. Again he was light and shadow. The spilled liquid approached the shadow and was devoured in it as though it had never been, but still the aroma stood on the air.

The general said: "Imagine, if you can, David, that Earth were attacked, and the attack destroyed many of the military installations. After you struck back, David, what would you do next?"

"I don't know, sir. I'm not a strategist, I'm afraid."

"What about your cities? The millions of people trapped without supplies — over-running the countryside, looting, plundering in search of food. Carrying pestilence and disease and terror. What would you do, David?"

"Well, I guess I'd try to organize some relief organization or something."

"But David, Anything you di-

verted to care for these people would limit your ability to fight back, wouldn't it? They would be cluttering up all your transportation, frustrating effective retaliation. Your second move would be to take the bombs which destroy people and not property and ... use them on your own cities."

Captain Arnold drained his glass. "That would be . . ." He did not finish.

"Insane, David? No. Rational. drained it.
Again there was silence.
"David, do you think I'm in much trouble?"
T'm afraid so, General. The Committee is due to arrive to-morrow."
"I know," the general said."
This suicide isn't going to help us. Tomorrow Is it that soon? It thought ... yes, I guess' I in thought ... yes, I guess' I

ists. The job comes first. In this case, the job of defeating the en-

emy ... But what does that have

to do with us? Nothing, eh?

You're right. Sometimes I like to

talk, and I suppose that's one of my privileges. I'm not the ideal-

ist I used to be, I guess. I remember when I was your age. I saw

things differently than I do now.

What used to seem important no

longer does Each stage of devel-

opment has its unique biological

imperatives: a child, a vouth, a

mature man, look out on the

to different chemistries. But the

job remains." General Shorter beld up his glass, "Cheers." He

tomorrow . . . Well, we've been here long enough to lose our immunity, so we'll all catch colds." Captain Arnold stood. "I better get started on my report." "Poor Sergeant Schuster," General Shorter said. "If anyone's to blame, it must be me."

"He obeyed the orders."
"What did you say?"

Field Commanders must be real- "What did you say

"I said he obeyed the orders, sir."

"Of course he obeyed the orders," the general said. "What else could he have done?"

11

THE long ship hung in orbit above Miracastle and discharged its pessengers. The Scout Ball could handle them: saving energy, which along with time itself, is the ultimate precious commodity of the universe governed by the laws of entropy.

The Scout Ball settled through

the dark turbulence undisturbed by the hissing winds. It howered momentarily in the invisible beacon above the Richardson dome as if both attracted and repelled. It moved horizontally and settical suited figures on the surface wrestled with its flexible exittube against the storm, lighting Richardson dome. The cut-tube moved rhythmically until the moved rhythmically until the Scott Ball inched away drawing

it taut. Pumps whirred. The suited figures entered the forward lock of the Scout Ball. Inside, General Shorter divested himself of the helmet. The suit hung upon him like ancient,

hung upon him like ancient, wrinkled skin.

He asked, "What time is it?"

Upon being told, he nodded with satisfaction. "Seventeen

 minutes, total. Good job. Who's in charge?"
 "A Mr. Tucker, sir."

"Tucker? Jim Tucker, by any chance?"

"Yes, sir."
General Shorter grunted.
"Served with him once. He's prob-

ably forgotten . . . That's all right.
I'll keep the suit on."
"I don't think they're expecting

"I don't think they're expecting you with the surface party, General."

"Probably not or they'd be here. Earth crew?"

"They've been out ten months

or so, sir."

"We will have colds, then.
Would you take me to Mr. Tucker, please?" To the other suite
men he said, "Good, fast job."

General Shorter followed the crewman up the spiral staircase and along the corridor. His hand touched a frictionless wall. "New plastic?"

"This is one of the most recent balls, sir."
"How does it handle?"

"Quite well, sir."
"I miss the Model Ten," he

"There's only a few left now, I guesa."

"I haven't seen one in years."

The crewman stopped before a
numberless panel. He knocked
politely, "Mr. Tucker? I have

General Shorter here. He came out with the surface party."

Mr. Tucker's voice the adea of surprise partly lost through the partition, came: "Tust a moment." In silence they waited, General Shorter moved restlessly Several minutes passed

The panel opened

MR. TUCKER was a short, ro-tund man, His close-cropped hair was graving, although his face was unlined with the smooth complexion of a child His irises were gray and gold.

General Shorter stepped forward and introduced himself. "Come in."

The panel closed The two men stood, General Shorter glanced around for a

chair. "Small quarters," Mr. Tucker said. "If you like, sit there I'll sit

on the bed."

They arranged themselves. "Perhaps you don't remember me?" the general said, "We served together - what, ten years

ago? - for about two weeks on Avalon, I believe it was." "Yes, I thought that was the case. You have a good memory.

General." "Please," the general said, "just call me Max."

Mr. Tucker considered without committing himself. He proffered a cigar. The general de-

clined. Mr. Tucker lighted the cigar

carefully moving the flame sayeral times across the blunt and He regarded the results without expression. "A cigar should be properly lit. General," he said. "Yes, yes, I suppose so." the

general said He paused to worry at a wrinkle on his suit. "Good trip out?"

"Routine"

"New ship? I notice this is one of the new Balls." "Mark Six." "Ah, those I've always liked

the Mark Six. Solid construction. I've been Destroyed maybe half the time in the Most Siver Foot one of the Marks has its own personality - I've always thought so. I don't suppose you remember the old Mark Two? That was a long time ago. I've been around, We got lost in one once. It picked a pseudo-fault line and . . . well,

guess?" "Hasn't changed." "I don't know when I'll get

never mind Farth the same I back," the general said. The statement seemed to dangle as though it were an unfinished question.

"The new detectors have put Miracastle on the fringe of thines."

"I've followed the work," the general said. "I try to keep up. It involves a new concept of mass

variation, doesn't it?" 'It just about makes it uneconomical to colonize a two-stage planet any more. Or to keep one going."

The general's evelids flickered His body moved beneath the wrinkled folds of the surface suit. Cigar smoke curled in the still air.

Mr. Tucker said, "You must have been aware that it would not have been a great loss to have evacuated Miracastle."

The general shuffled in silence. "Yes, sir, I knew the background It's part of my job to know things like that, You'll find, sir, that I

have a strong sense of responsibility. If it's part of my job, I'll know about it." General Max Shorter abruptly stood and for a moment was mo-

tionless, a man deformed and diminished in stature by the ill-fitting surface suit. Expressionless, he looked down, without psychological advantage, at the seated civilian holding the partially smoked cigar.

Later the same day. Mr. Tucker and two of the three other members of the Committee donned surface suits and together with Captain Meford, the cartographer assigned to Miracastle.

they boarded the surface scout. They arranged themselves in the uncomfortable bucket seats

and strapped in. "Little early for an easy ride."

Mr. Tucker commented "I've been out before," Captain

Meford said laconically It was his usual manner "How long do you think it will

Between fifteen and twenty

minutes, if I don't hit too much cross wind." Mr. Ryan, one of the other two

civilians, commented, "A long time between cigars, eb. Iim?" The question was out of place and was ignored without hostilitv.

Mr. Rvan twisted uncomfortable. At length he said, apologetically, "Dirty, filthy business, I wish it were over with."

"So do I." Mr. Tucker said. Contain Majord activated the ramp and essed the scout out. It was immediately buffeted by the

winde

"Sorry" he said "It'll take a minute. Hold tight." The scout moved in three dimensions enratically. "Wow! Let's set it at about twenty-six inches Sorry. This will slow us down, but it will ease the bumps on down draft. There That's better. We're okay

now. I think, I guess we can settle back." Thirty-five minutes later, they came to what was left of the alien

city. BACK in the Richardson dome, General Shorter had coffee, in his quarters, with the remaining man on the Committee, a Mr.

Flison. They were going through the ritual of conversation. "This is the first time you've

been Destroyed then, sir," the general said. "My first time was so long ago I've forgotten what it feels like."

"I was uneasy in advance," Mr. Filson said. "You read various descriptions about the physical sensations. Intellectually, of course, you draw a distinction, but emotionally you know that the only word which applies is death — pure and simple. But there's no sensation. It happens

too fast. You don't even notice it." Politely attentive, the general had leened forward. "I don't think it could be put better, he contributed. "That's very apt. You don't even notice it." Mr. Flison's eyes nerrowed in

speculation. They maintained the general's own in unwavering focus. He did not acknowledge the compliment.

The general's eyes broke to one side. He moved nervously as

one side. He moved nervously as though physically to dismiss the tactical error of underestimating his opponent.

his opponent.
"Since this is your first planet,"
the general said, "perhaps you'd
like to see something of the operstion? Basically, we have nine
Richardson Domes here on Miracastle. Two are the living quartage...... the other similer to this

Right now domes Seven and Nine are the more important. They contain the air-chenging equipment We are holding tightity to our completion date, and these two — Seven and Nine will be pulled out in fifteen days. That is to say, they will, berring any serious interruntions in our

work. On schedule, I should point out."

The general poured coffee for himself. Mr. Flison politely declined.

"When you've been in the Corps as long as I have," the general resumed, "the schedule becomes a part of you. Everything

"he held his hands before him, fingers spend, point Secing, and drew them together — "converges on that. It's that simple. Other planets are waiting. In a society as complex as complex as cong. a million—and I mean this literally, sif — a million decisions must be reviewed if the schedule falls behind Delay of a critical item of equipment can necessitate an un-believably was reassignment of successions and the constraint of the control o

technology."

"General Shorter, I think perhaps you're being carried away a little. I'm sure we have adequate procedures to accommodate minor variations in equipment delivery dates. If we don't the Lord help us: we'd have been dead

long ago."

The general was in the process
of forming an immediate renly.

of forming an immediate reply, but he reconsidered. When he reached for the coffee, which by now was coal and hitter, his hand

now was cool and b

The general licked his lips.
"More coffee? No? Well, I didn't intend to get off on this. I really wanted to ask if you'd like to inspect our operations." He glanced at his time piece. "I could show you the present shift operation in Dome Nine."

Mr. Flison rose. "No, General, I don't want to be of any bother. I wouldn't want to interfere with your — work."

ш

44 CITY" is not necessarily descriptive: perhaps less so than the application of Euclidean axioms to advanced geometry. Physically, it was this:

 Three dozen stone arches whose keystones were inverted bowls.

A smooth-walled recess in
the sheer face of a cliff.
 A level lip of rock, as precisely flat as though honed, from

3. A level lip of rock, as precisely flat as though honed, from which the arches seemed to grow. "Is this all?" Mr. Tucker asked. "Yes, sir," Captain Meford said. Mr. Ryan came to the viewing section. "It looks," he said, "as

though the cliff were split down to here and then hewn away to leave the structures there and the arron."

"We found no tools, sir. There were no tools here, nor with them."

"Nothing else at all?"

"They left behind some four

hundred chips of stone, apparentty numbered. We have them in
the dome. And there's a two-line
inscription on one of the arches.
There's nothing else."
High above the men and the
ship, the new wind sany in one of

the inverted bowls and fluttered lightly over the inscription. It, like the face of the cliff, was oxidizing. Dust filtered down before the recess, alien symbols falling. Life is the recording angel of time. Without life, all cesses.

"Dust," Mr. Tucker said. "Dust...dust... more dust. Soon the dust will be over everything. When the wind is gone, it will be there to hold our footprints."

Inside the air-conditioned scout, the men shivered.

them?" Mr. Ryan asked.
"I saw the constructions from
the photos, sir. This had been
missed by the mapping party. It's
easy enough to see why when you

see the pictures."
"This the only one?"

"This the only one?"
"Yes, sir."
"How can you be sure of that.

Captain Meford? It's a large planet "

*T had one of the machines scan the remaining maps for geometrical patterns, sir."

"Isn't that done routinely?" Mr. Tucker asked rather sharply. "Yes, sir. But you see, we've

always expected that if we were ever going to encounter intelligent life on a planet, it would be rather widespread. Accordinglyand this is the routine procedure. sir, used, as far as I know, by all contact parties - we ran through a statistically significant sample of the terrain. There was nothing on Miracastle out of the ordinary. There was the typical, low-order vegetable matter, about what we always find. It was a very typical planet, sir." The third man from the Earth

Committee, Mr. Wallace, seldom spoke. When he did, his voice was mild and there was a sense of child-like wonder in his tone. "The natives?" he asked "They . . . had fled when we

discovered the city." "Where did they flee to?" Mr. Wallace asked.

CAPTAIN MEFORD glanced Caprain State over followed to end just below the edge of the view ecreen Above stood the sheer face of the cliff. Clouds roiled below the summit obscuring it from view.

"There is a long sloping plateau un there and a series of notural caves back in the next cliff face." Cantain Meford said. This did not seem adequate. He continued: "Most of the air-changing activity starts in the low-lying areas, at first around the dome positions. It advances along an elevation front, gradually drifting up. Little tongues are carried up in advance by the heated currents The olions retreated before it. On the plateau you can see the sentries. I guess they posted themselves there, at intervals, between the edge and the new caves, to define the limits of safety. They died there Six of them. The rest, several hundred.

reached the caves. They are "I see." Mr. Wallace said. "When you first discovered them - 2" Mr. Ryan asked after a moment. Captain Meford hesitated.

Mr. Tucker said: "I believe one of your men killed himself last night - wasn't it? A technician? I was told he felt you could reverse the air-changing equipment in time to save the aliens. I understand that was very much

on his mind for the last week or "I'm not too familiar with the man sir He was on Cantain Arns

95

old's shift. I believe." "Captain Meford," Mr. Ryan

dead, too."

insisted, "when did you say you first discovered the aliens?" Captain Meford hesitated. The

Captain Meford hesitated. The others waited.

"They were then scaling the

cliff, sir."

"And General Shorter, was he told of this immediately?" Mr.

Ryan asked.
"I don't know when the general

was told."

"You discovered them?"

"Yes, sir, I . . . you see, at the

time the winds completely prohibited air traffic. As you know, the air scouts are not stable enough until . . . later, I . . . Yes sir I discovered them."

"Did you then inform the general?"
"No, sir. I informed the duty officer."

"Did he inform the general?"
"I don't know."
"Why didn't you tell the gen-

eral?" Mr. Tucker asked.
"I was then in communication
with Captain Geiger, and I felt
be ..." The sentence trailed

"Would tell the general?" Mr. Tucker prompted, "Well, did he?" "I believe he did, sir," Captain

"I believe he did, sir," Captain Meford said. He let out a long breath.

"May we see the aliens?" Mr. Ryan asked. "I wouldn't advise it, sir," Captain Meford said. "High flights

u are still very risky because of the wind velocities."

A FTER the evening meal, General Shorter called Captain Arnold aside. "Mind if I go over to Nine with you?" he asked. "The air around here is — well, the fact of the matter is. I'd like

to get away from them for awhile."

"Of course not, sir," Captain Arnold said.

Arnold said.
"We'll call it an inspection.
Which might be a good idea at
that. With these people running
around trying to interfere with
my schedule. Poking around. Ask-

ing questions. Taking men away from their work, basically. He tapped his toeth with his right thumb in reflection. "I'd better check up on all the domes tonight, just to be sure."
"Yes, sir."

"I wouldn't want anything to go wrong because they're here." In the dressing quarters, they donned surface suits and exited

through the locks to Miracastle.

In the area immediately beyond
the Dome, the solidly positioned
connection rails radiated away.
The general gestured for the can-

tain to lead.

The wind buffeted them. Inside the surface suits it was quiet.

"David?" the general asked.
"Yes, sir?" Captain Arnold said.
He was fastening his safety line

away.

in the keyed slot. He fumbled with it for a moment before the wind

"You on suit communications?"

"Yes, sir." Captain Arnold straightened and moved forward. The general replaced him and dropped his safety line in place

with practiced efficiency. Captain Arnold, surrounded by dust devils, became a distant, indistinct bulk His motions were ponderous. The general could no

longer see his face or his expression "I do not entirely understand this, David," the general said conversationally. "The investigation. I thought I had powerful friends in the Corps. Though a man makes enemies." The general lurched awkwardly over the broken surface of Miracastle. drawing the safety line taut. He moved toward the connection rail again, "A general is separated from much of his command Some of the technical refinements are too involved - and of course men hide their feelings." Once again he struggled with the wind, turning slowly at the end of the safety line: held from the devouring anger of the planet only by the slender umbilical cord from the stars, "General Grisley, now. I think he's sixteen star, in headquarters. He was a politician. He came up fast,

In fact, he was my adjutant a few years ago. He was always a man to hold a grudge."

Captain Arnold made no reply. "You know how politics is in the Corps."

Dome Nine rose from the swirling mist before them. The wind seemed to increase in fury. And still, inside the suits, there

was the sound only of labored breathing and the general's voice. "These natives," the general said. "They were very primitive, David." Neither could see the other's face, "I can't think of them as intelligent at all. I feel they were very low on the evo-

lutionary ladder. I wouldn't call it a city, as I've heard it called. Natural formation, more likely. Nature plays strange tricks." THEY were at the lock of

Dome Nine.

Inside, the general removed his helmet, "David," he said, "I've been meaning to talk to you for some time now. You've got a good career in front of you in the Corps. You're going to move up. With a few breaks right to the top. I'm just now writing up my evaluation for your files. I plan to give you a very fine recommendation Captain, Normally, I don't talk about this sort of thing. but I thought you might like to know."

"Thank you, sir." Captain

Arnold said uneasily, opening his

surface suit.
"Well, let's inspect the area,

Captain."
The inspection was perfunctory. As he always did, the general paused at the pile monitor and watched, in the Danie screen, the pile of the pile of the pile tions being sustained far beneath the surface: molten rock flowing and amoking. Orange, blue and white flames danced as though in agony in the great, expanding covern, dunced and merged and ever-changing pattern.

Back at the locks, the general bid Captain Arnold good-by and turned to leave. Then, as if an afterthought came forward, he turned back.

"David, oh, David!"

"Perhaps you remember a conversation we had a few weeks ago? I called on you for some technical advice." He held his

helmet in his hands.
"When was that, sir?"
"Oh, it was about the technical

"Oh, it was about the technical feasibility of reversing the airchanging equipment, I believe. As you know, I can't be up on all the technical, purely detailed procedure, for all phases of the operation. That's what we have experts for." The last statement was unusually jovial. "I believe you told me. David, that the

process was too far along at that time. Perhaps you remember?" "General Shorter, when was that?"

"I thought you would remember, David. I'm sure it was you. Yes, I'm almost positive it was But if you say . . . Well, David, it wasn't quite so much as exactly a statement like that But that was the general meaning of it, you know, stripped of all the technical language. You have to take it in the over-all context. That was the meaning I got," He laughed tactfully. "You're like lawyers, all you technicians. You answer everything yes and no at the same time. I hoped you'd remember the conversation, I got that idea from it." The general waited, "Well, David - don't look like that - it's not at all important. Just trying to refresh my own memory. It's not important, really Good night David " He placed the helmet over his head.

"Good night, General."

Methodically the general completed his rounds. He laughed often and joked with the men and seemed in exceptionally good

Back in his own quarters, he brought out his diary. With a weary sigh, he sat down to it. He glanced at his timepiece. The day extended backward almost beyond memory but it was not yet late.

spirits.

lessly for several minutes pausing now and then at a paragraph — he began to write. He put the events of the day down precisely in their logical se-

THE Committee took over the dining area when the general left for his tour of inspection. While the steward's department was preparing coffee for the interviewees, now assembling in the corridor, the four members of the Committee arranged themselves at the larger of the tables. Notepaper lay before them.

fingered it. "A rather good meal," he said. The others nodded. "I may as well start off while

we're waiting," Mr. Wallace said.
"I'll summarize my somewhat contradictory observations.
"Superficially, the cultural level of the natives appeared quite primitive. The absence of tools would normally be indicative. On

el of the natives appeared quite primitive. The absence of tools would normally be indicative. On the other hand, the city was carved from rock in a way so as to suggest a very sophisticated technology. And writing, while apparently not practiced to any considerable extent, was known — or, if not writing as we understand it some advanced decora-

After thumbing the diary listssly for several minutes — times of it, at least, using now and then at a para-"Asain superficially, the city

would suggest a nomadic tradition, but for its craftsmanship. It seems independent of any obvious supply of food and their equivalent of water, if any. Nor were any provisions in evidence for the disposal of waste products. Yet the city had the appearance of age and continual usage, If you notice, the floor of the recess was worn unevenly toward the centre by what I should guess

"The thought naturally occurs that the aliens were the rather decadent relics of a highly developed technological elvilization existing on the planet in the not obtain a part. Yet Miracostie offers no evidence for the exist offers no evidence for the content of a proper or technology — nruins, no residual radioactivity from atomic operations. In short, the city has no apparent genesis in the nast.

"The alternative arises: perhaps the natives were not natives at all, but immigrants or colonists like ourselves. Yet the age of the city contradicts this.

"Perhaps there is a simple explanation, although it does not occur to me. But I do have this feeling. The city was utilitarian. To me, it calls to mind one of those exquisite etchings of Picassuggests simplicity. Yet, on further inspection, you see that each line contributes to a rather bewildering variety of perspectives. I strongly suspect that the city and the people of Miracastle will remain one of the great, unsolved mysteries of the universe."

Mr. Wallace was finished with his remarks. Mr. Ryan nodded. "Perhaps

I'm deficient in sensibilities, but I find that the most ... agonizing ... thing of all is not ever to be able to know what these people were like. It's almost as if some part of us had been lopped of, isn't it? What did the people of Miracastle think about? What was their philosophy of life? What was their social organiza-

was their philosophy or ner What was their social organization? What was their ultimate goals? When you realize how much we learned of ourselves from an examination of our own primitive cultures, the sense of loss realty comes home. Think learned of curvelves by acquiring the could continue and a stat if we could only understand a tarfil when culture ..."

"Well, that's gone," Mr. Tucker way escalator of non-commissaid. The words were brittle and discrete. They hung in memory to private, He was perhaps typiand the listeners waited as though: for an echo of something should His love of the Corro was ex-

so. The severe economy of line into a canyon. The echo did not

come. They were silent, Grief is the final knowledge of time. When one first learns that it can never be turned backward upon itself to permit the correction of past sins and the rightings of wrongs transfixed and forever unalterable. Grief is the frantic, futile beating of hands against a barrier without substance both obscenely unreal and yet the only reality. Grief is the knowledge that we cannot step backwards before the death of loved ones and see those precious half-forgotten dream faces once again. Grief is the

Outside the Richardson Dome, the wind was changing, It could now neither support the life that was nor the life that would be, and it howled in melancholy and insensate anguish its Ionelliness and longing to the eternal and ever-changing pattern of the stars.

knowledge that time is immuta-

blo

THE Committee concluded their interviews with an oldline corporal. He had just short of thirty years service and had several times traveled the two-way escalator of non-commissioned rank from master sergeant to private. He was perhaps typical of many of the older soldiers. pressed by his loyalty to it; his hatred of the Corps was expressed by his inability to abide by its regulations.

"You knew Sergeant Schuster very well?" Mr. Tucker asked.

very well?" Mr. Tucker asked.
"He was a new man," the corporal said. "He got on just before
lift-off, A week, two weeks, something like that I knew him, I
guess. He was one of them kind
that was always thinking, And
like you know, sir, thinking ain't
too good for a soldier. I've known
a lot of guys like that in my time.
You know what I mean? They're
not cut out for the Corpa."

"He talked to you quite a bit?"
The corporal turned to face
Mr. Ryan. "He was always talking, sir. He was a regular nut. I
thought for a while he was queer.
He had all those crazy ideas."
"Like what. Corporal?"

"Oh, like — well, you know."
The corporal hesitated and rummaged his memory without conspicuous success. "Sunsets," he
said rather emphatically. "Talked
about sunsets. Talked about just
anything. Called me out back on
Earth to look at a sunset once, I
remember."

"What did he think about killing the natives?" Mr. Wallace

ing the natives?" Mr. Wallace asked. The question alerted the mech-

anism which produced the almost-Pavlovian loyalty response, "We didn't kill no natives," the

s corporal said. "They just died when we changed the air. Tough." He looked at Mr. Wallace and

then into the silence around him. "Well"... well, let's see. I guess you'd say that sort of got to him. I mean, you know, he thought it was —"the voice became distant, as as though describing a fantastic event which he could not relate to snything in a rational environment — "he thought it was him fault. You know how some if shall, You know how some if these guys are I used to have a platoon once, you know and

they say — He twisted his mouth and changed his voice to a childish whine. "What for?" The voice reverted to normal. "They don't sak for any reason. They just ask for any reason. They just ask I say to them, I say, "God damn it — excuse me, sir — I told you to do it, sin't that enough?" Well, this Schuster, sir, he worried all the time. He

I say, he was a nut."

No one spoke for a moment,
and the corporal twisted uncom-

and the corporal twisted uncomfortably.

Then Mr. Tucker said, "Well,

Corporal, tell me this please." "Ves. sir." "What's your own personal im-

pression of General Shorter?" "The old man?" the corporal asked in surprise, "He's okay," "Feel free to discuss this," Mr. Flison said "We'd like to know

really, what your oninion is " "Like I say, he's okay. He's got a job to do. You know he husted me once, General Shorter personally, I mean Hell, I don't hold it against him, though. He's got his job to do. I got mine. I wouldn't say anything against General Shorter, no. sir. He's a soldier. I mean, you know . . . he's a sol-

missed, Mr. Tucker said, "Well, gentlemen. I guess we've about wrapped it up here. I think this is enough. Anybody's mind changed? I don't think we need any more, do you?" Mr. Wallace sighed heavily.

After the corporal was dis-

He looked down at his hands CENERAL SHORTER was still at his writing desk when

he was notified that Mr. Tucker would like to see him first thing in the morning. "Another day of it, eh?" the general asked the sergeant who

brought the message. "No sir From the other crew. I hear they're planning to leave tomorrow."

The general's face relaxed His smile reflected weary tolerance "Had enough in one day, have they? It's about time they let us get book to work "

After the sergeant left, the general wrote a final paragraph:

"I've just been informed the 'investigation' is completed. In record time, it seems. They finished up in the mose topisht tells ing to some of the men. So what did it all really accomplish? They took a long ship that could better have been used somewhere else. Half my men are down with the virus. They almost cost me my schedule. And to what end? Just another piece of paper somewhere. Put Miracastle on the scale against some nice, heavy

report and see which way the The general closed the diary. It was late now. He was very tired

MR. TUCKER, after breakfast, door.

"Come in." General Shorter called. The civilian entered. The gen-

eral dismissed the orderly with a nod, "And I'll need some clean towels for tonight," he called, His voice was boarse "Ves oir."

The door closed. The two of them were alone

scale tipe"

dier B

"Sit down, Excuse the cold. Got it last night. What do you say to a brandy?"

"Don't let me stop you." "I never drink alone." "Perhaps you'd better," Mr.

Tucker said. The general had paused just short of the cupboard. He turned slowly, "In that case, I'll make an

exception, this once." He poured. "Just what did you mean by that, sir? Let's get to the point." "General Shorter, we're going

to have to ask you to come back with us." The general bent slightly forward. His lips were partly open.

as though he were listening to hear a second time "Why." he said. "I've too much work to do, sir, I'm afraid that's out of the question. It's just not

possible at all." Mr. Tucker waited. General Shorter poured him-

self another brandy. His back was to the civilian "There's nothing more important, right now, than my job here," he said. He drank the

brandy in a single guln. "I don't see how it can wait. General," Mr. Tucker said. The general's lips were dry. He closed his eyes tightly for a moment against the alcohol and the cold. He licked his lips, "What's

the formal charge?* Mr. Tucker bent forward. His

voice was soft and curious, as though the question were his final effort to understand something that puzzled him for a long time.

"What do you think it is, General?" "What could it be?" the gen-

eral said sharply, "I follow orders, sir. I was sent out here to make this planet suitable for human habitation. This is exactly what I have been doing," His voice was growing progressively angry and with an effort he curbed himself, "Put yourself in my position. I did what any field commander would have done. It was too late to stop it. I've got -It's a question of the limits of

normal prudence. A matter of in-The general was in the process of pouring still another drink, The slender brandy glass broke under the force of his anger. He opened his palm. Blood trickled from between his fingers.

terpretation, sir."

The general looked up from the hand and fleeting annoyance came and went before he was recalled to present reality. His eyes met Mr. Tucker's.

Mr. Tucker suddenly shivered as if touched by a wind from beyond the most distant stars, a wind which whispered: The

aliens are among us. "General," Mr. Tucker said,

103

"the formal charge is murder." - KRIS NEVILLE



ANUEL shouldn't have been the top. He knew better. But he did write a nice round

The place called Sadam was bad enaugh. But right dawn the raad was the other town - and that was even warsel

Sodom

and

Gomorrah,

Texas ODOWY COMO

By R. A. LAFFERTY Illustrated by RITTER

employed as a census taker. He wasn't qualified. He couldn't read a map. He didn't know what a map was. He only grinned when they told him that North was at

hand, like a boy's hand. He knew Spanish and enough English For the sector that was assigned to him he would not need a man. He knew it better than anyone else. certainly better than any mapmaker. Besides, he was poor and needed the money.

They instructed him and sent him out. Or they thought that they had instructed him. They couldn't be sure. "Count everyone? All right, Fill

in everyone? I need more papers." "We will give you more if you need more. But there aren't so many in your sector."

"Lots of them. Lobos, teiones. zorros, even people." "Only the people, Manuel! Do

not take the animals. How would you write up the animals? They have no names." "Oh, yes, All have names, Might

as well take them all." "Only people, Manuel."

"No" "Consine?"

"No. Manuel, no. Only the eople."

"No trouble. Might as well take them all."
"Only people—God give me

strength!—only people, Manuel."
"How about little people?"
"Children, yes, That has been

"Children, yes. That has be explained to you."

"Little people. Not children. lit-

done.

"If they are people, take them."
"How big they have to be?"
"It doesn't make any difference
how big they are. If they are

people, take them."

That is where the damage was

The official had given a snap judgement, and it led to disaster. It was not his fault. The instructions are not clear. Nowhere in all the verbiage does it say how big they have to be to be counted as pecole.

MANUEL took Mula and went to work. His sector was the Santa Magdalena, a scrap of baldheaded and desolate mountains, steep but not high, and so torrid in the afternoons that it was said that the old lava sometimes began to writhe and flow again from the sun's heat alone.

sun's heat alone.

In the center valley there were five thousand acres of slag and vitrified rock from some forgotten old blast that hed melted the hills and destroyed their mantle, reducing all to a terrible flatness. This was called Softon It was

e strewn with low-lying ghosts as of people and objects, formed when the granite hubbled like water

Away from the dead center the ravines were body-deep in chaparral, and the hillsides stood graygreen with old cactus. The stunted trees were lower than the giant

trees were lower than the giant bushes and yucca.

Manuel went with Mula, a

round easy man and a sparse gaunt mule. Mula was a mule, but there were other inhabitants of the Santa Magdalena of a genus less certain.

an oddity in her ancestry. Her peternal grandfather had been a goat. Manuel once told Mr. Marshal about this, but Mr. Marshal had not accepted it. "She is a mule. Therefore, her

father was a jack. Therefore his father was also a jack, a donkey. It could not be any other way." Manuel often wondered about

Manuel often wondered about that, for he had raised the whole strain of animals, and he remembered who had been with whom. "A donkey! A jack! Two feet tall and with a beard and horns. I always thought that he was a goat."

Manuel and Mula stopped at noon on Lost Soul Creek. There would be no travel in the hot afternoon. But Manuel had a job to do, and he did it. He took the forms from one of the packs that he had ussuing from Mula, and people. He knew all there was to know about them, their nativities and their antecedents. He knew that there were only nine regular people in the nine hundred square miles of the Santa Magdalena.

But he was systematic, so he checked the list over again and again. There seemed to be somebody missing, Oh, yes, himself, He got another form and filled out all the data on himself

Now, in one way of looking at it, his part in the census was finished. If only he had looked at it that way, he would have saved worry and trouble for everyone. and also ten thousand lives. But the instructions they had given him were ambiguous, for all that they had tried to make them clear So very early the next morning he rose and cooked beans and said "Might as well take them

oll." He called Mula from the thorn patch where she was grazing, gave her salt and loaded her again. Then they went to take the rest of the census but in fear. There was a clear duty to get the job done, but there was also a dread of it that his superiors did not understand. There was reason also why Mula was loaded so she could hardly walk with packs of census forms

Manuel prayed out loud as they

counted out nine of them. He climbed the purgatorial scarp wrote down all the data on nine above Lost Souls Creek, "ruege por nosotros pecadores ahora-" the very gulches stood angry and stark in the early morning-"y en la bora da navetra muerta"

> THREE days later an incredible dwarf staggered into the outskirts of High Plains, Texas, followed by a dying wolf-sized animal that did not look like a wolf. A lady called the police to save the pair from rock-throwing kids who might have killed them, and the two as yet unclassified things

more taken to the station house The dwarf was three foot high, a skeleton stretched over with brown-burnt leather. The other was an un-canine looking dogsized beast, so full of burrs and thorns that it might have been a porcupine. It was a nightmare

replica of a shrunken mule, The midget was mad. The animal had more presence of mind: she lay down quietly and died, which was the best she could do. considering the state that she was

"Who is census chief now?" asked the mad midget. "Is Mr. Marshal's boy the census chief?" "Mr. Marshal is, yes. Who are you? How do you know Marshal? And what is that which you are pulling out of your pants, if they are pants?"

"Census list. Names of every-

body in the Santa Magdalana I had to steel it" "It looks like microfilm the

writing is so small And the roll goes on and on There must be a million names here."

"Little hit more little hit more I get two bits a name."

They got Marshal there He was very busy but he came He had been given a deadline by the mayor and the citizen's group. He had to produce a population of ten thousand people for High Plains Toyes and this was difficult for there weren't that many

people in the town. He had been working hard on it, though: but he came when the police called him. "You Marshal's little how? You look just like your father" said

the midget. "That voice, I should know that voice even if it's cracked to pieces. That has to be Manuel's voice."

"Sure, I'm Manuel. Just like I left thirty-five years ago." "You can't be Manuel, shrunk three feet and two hundred pounds and aged a million."

"You look here at my census slip, It says I'm Manuel, And here are nine more of the regular people, and one million of the little people. I couldn't get them on the right forms, though, I had to steal their list."

"You can't be Manuel," said Marshal "He con't be Manuel," said the

declare that place annexed forthwith This will make High Plains

big policemen and the little policemen "Maybe not then," the dwarf

conceded. "I thought I was but I wasn't sure. Who am I then? Let's look at the other papers and see which one I am."

"No you can't be any of them either, Manuel, And you surely can't be Manuel."

"Give him a name anyhow and get him counted. We got to get to that ten thousand mark."

"Tell us what happened Manuel-if you are. Which you aren't. But tell us."

"After I counted the regular people I went to count the little people. I took a spade and spaded off the top of their town to get in. But they put an encanfo on me, and made me and Mula run a

treadmill for thirty-five years." "Where was this?" "At the little people town, Nuevo Danae. But after thirty-five years the encanto wore off and

Mula and I stole the list of names and ran away." "But where did you really get

this list of so many names written so small?" "Suffering saddle sores, Marshal, don't ask the little bug so many questions. You got a mil-

them! Send them in! There's

enough of us here right now. We

GALAXY

the biggest town in the whole dreamed that they were little state of Teves" people." "Prairie does can't write as

So Marshal certified them and sent them into Washington. This gave High Plains the largest percentage increase of any city in the nation, but it was challenged. There were some soreheads in Houston who said that it wasn't possible. They said High Plains

had nowhere near that many people and there must have been

story.

a miscount And in the days that the argument was going on, they cleaned up and fed Manuel, if it were he, and tried to get from him a cogent

"How do you know it was thirty-five years you were on the treadmill. Manuel?"

"Well, it seemed like thirty-five vears."

"It could have only been about three days." "Then how come I'm so old?" "We don't know that, Manuel,

we sure don't know that. How big were these people?" "Who knows? A finger long,

maybe two?" "And what is their town?" "It is an old prairie-dog town that they fixed up. You have to

dig down with a spade to get to the streets." "Maybe they were really all prairie dogs, Manuel. Maybe the

good as on that list, Prairie dogs can't write hardly at all." "That's true. The list is hard to

explain, And such odd names on it too! "Where is Mula? I don't see

Mula since I came back" "Mula just lay down and died,

Manuel. "Gave me the slip. Why didn't I think of that? Well, I'll do it

too. I'm too worn out for anything else." "Before you do. Manuel, just a couple of last questions."

"Make them real fast then, I'm on my way." "Did you know these little

people were there before?" "Oh, sure, There a long time." "Did anybody else ever see

them?" "Oh, sure. Everybody in the Santa Magdalena see them. Eight, nine people see them."

"And Manuel, how do we get to the place? Can you show us on a man?"

Manuel made a grimace, and died quietly as Mula had done. He didn't understand those maps at all, and took the easy way out. They buried him, not knowing

for sure whether he was Manuel

109

come back, or what he was, There ween't much of him to that Marshal was awakened by the ring of an authoritative voice. He was being harangued by a four-inch tall man on his bedside table, a man of dominating pre-

table, a man of dominating presence and acid voice.

"Come out of that cot, you

clown! Give me your name and station!"
"Tm Marshal, and I suspect

"I'm Marshal, and I suspect that you are a late pig sandwich, or caused by one, I shouldn't eat so late."

"Say 'sir' when you reply to me. I am no pig sandwich and I do not commonly call on fools. Get on your feet, you clod."

And wonderingly Marshal did.
"I want the list that was stolen.
Don't gape! Get it!"

"What list?"
"Don't stall, don't stutter. Get me our tax list that was stolen. It isn't words that I want from you." "Listen. you cicads. I'll take

you and—"
"You will not. You will notice
that you are paralyzed from the
neck down. I suspect that you
were always so from there up.
Where is the list?"

"S-sent it to Washington."
"You bug-eyed behemoth! Do
you realize what a trip that will
be? You grandfather of inanities,

it will be a pleasure to destroy you?"
"I don't know what you are, or

IT was the same night, very late if you are really. I don't believe and after he had been asleep, that you even belong on the that Marshal was nearleaned by world."

"Not belong on the world! We own the world. We can show written title to the world. Can you?" "I doubt it. Where did you get

ten title to the world. Can you?"
"I doubt it. Where did you get
the title?"
"None of your business. I'd

rather not say. Oh, well, we got it from a promoter of sorts. A con man, really. I'll have to admit that we were taken, but we were in a spot and needed a world. He said that the larger bifurcates were too stupid to be a muisance. We should have known that the

stupider a creature, the more of a nuisance it is."
"I had about decided the same thing about the smaller a creature. We may have to fumigate that old mountain mess."
"Oh you can't harm us. We're

too powerful. But we can obliterate you in an instant."
"Hah!"
"Say 'Hah, sir' when you address me. Do you know the place

in the mountain that is called Sodom?"

"I know the place. It was

caused by a large meteor."

"It was caused by one of these."

What he held up was the size of a grain of sand, Marshal could not see it in detail.

"There was another city of you bug-eyed beasts there," said the small martinet. "You wouldn't know about it. It's been a few hundred years. We decided it was too close. Now I have decided that you are too close."

"A thing that size couldn't crack a walnut."

"You floundering foo, it will bleet this town flater

"What will happen to you?" "Nothing, I don't even blink for

things like that." "How do you trigger it off."

"You gaping goof, I don't have time to explain that to you. I have to get to Washington,"

It may be that Marshal did not believe himself quite awake. He certainly did not take the threat seriously enough. For the little man did trigger it off.

WHEN the final count was in, High Plains did not have the highest percentage gain in population in the nation. Actually it showed the sharpest decline, from 7313 to nothing.

They were going to make a forest preserve out of the place. except that it has no trees worthy of the name. Now it is proposed to make it the Sodom and Gomorrab State Park from the two mysterious scenes of desolation there, just seven miles apart.

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Why wouldn't the fools take it from him?

By HELEN M. URBAN

THE GLORY OF IPPLING

THERE'S an axiom in the galaxy: The more complicated the machine, the bigger mess it can make. Like the time the planetary computer for Buughabyta flipped its complete grain-futures series. The computer ordered only 15 acres, and Buughabytians had to live for a full year off the eovernment's stored surplus thus nounding down the surplus forcing up the price, eliminating the subsidy and balancing the Buughabytian budget for fifteen years - an unprecedented bit of nonsense that almost had permanent effects. But a career economist with an eye for flubup and complication managed to restora balanced disorder, bringing Buughabyta right back to normalcy. Or like the time a matter-duplicator receiver misread OCH, CH₂-OH, to turn out a magnificently busted blonde sphygmomanchursier with an HOCH,OH replacement, putting a strain on the loyalty of a billion teen-age girls dedicated to Doyle Oglevie worship. Doyle-she, as it took quite a while for her hormones to overcome the memory of his easy, openable lappaing, tone-formating.

strain on his wardrobe, too.

No machine, of course, can
compare for complexity with any
group of humans who have been
collected into machine-like preci-

sion of operation. Take one time when an Ipplinger Cultural Contact Group was handed a Boswellister with V.I.P. connections and orders to put him to an assignment — for his maturity.

BOSWELLISTER sat patient ly. He squirmed emotionally up and down his backbone, but he affected a disclainful appearance of patience in view of the importance of his and his poppa's positions compared with the pawn-like minusculity of the audience's

The Blond Terror strode majestically down the aisle of the open air sports arens, preceded by twenty-four harem-darling dancing gifs. The orchestra walled an oriental sinuosity of woodwinds and drums, accompanying the hipt-witching, nearly naked, slove. (by benefit of makeup) eyed, black-haired beauties. Fifteen heavyweights, draped

Fitteen nearlyweights, trapec in leopard skims, had preceded the dancers to set up the Blond Terror's tub on a polar bear rug in the center of the ring. A dozen luscious watercarriers had emptied their jars into the tub. Soap and towels, oils and perfumes, mirror and comb were arranged on top of a lushly ornamented box that stood by one of the corner posts.

The Blond Terror vaulted the settled over the Blond Terror's ropes and stood in the ring, pophead, a halo of solid light for a

ping his muscles, waiting for his
handmaidens to remove the five
layers of elaborately decorated
ns robes that were draped over his
super-manly body.

Boswellister cringed slightly
(inwardly), sneutains that the

Blond Terror really was a muscled man. All that man—nearly seven feet tall, bronzed, developed, imperious, condescending to notice just slightly the adulations of the women in the packed arena.

The Blond Terror stepped into

the tub, carrying out his advertised boast of being the cleanest wrestler in the ring, a boast he was unable to prove with ring action through the exigencies of type-casting, for the Blond Terror was the villain.

The Blond Terror muscled down into the tub. He was scrubbed, then rinsed. He stood out onto the white fur rug and uneringly allowed his handmaidens to pat him dry and powder him down. They held up the large hand mirror and allowed him to view his handsomeness while his short-cropped, blond curls were carefully combed.

"Now." Boswellister spoke the order into the lapel receiver. On the Ipplinger starship a communications tech slapped home a switch and the solido-vision circle settled over the Rignd Terror's

complex Ipplinger signal-reaction

device.
"Hail Ippling!" Boswellister

shouted.

Boswellister strained forward, clutching the seat arms. It had to world His equation must be right The symbol had the proper cultural connotations. It was bound to capture the audience, put them in the right mood of awe-struck superstitious reverence, make the revelation of the great circle of the Epplinger starship overhead a billing of wonderment and devolution of the control of the properties.

The Blond Terror should now look upwards, guide the eyes of the audience, bring them to the recognition. After all, as a Boswellister... and according to his great grandfather, and his poppa too...

But the Blond Terror gazed appreciatively into the mirror.

smiling slyly at the audience.
The crowd roared its applause for the trick lighting effect. You could depend on the Blond Terror. No matter how many times you'd seen his act, he always managed to come up with something new. Now, for the opening of the new Million Dollar Ventura Boulevard Open Air Sports Arena, the

new Million Dollar Ventura Boulevard Open Air Sports Arena, the Blond Terror had done it again. Boswellister shouted. He pointed. He stared upwards, trying to draw the crowd with his vehemence. But he couldn't cap-

ion ture one gaze, no matter what he did.

to him, but the surly fool snarled, "Shuddup! The Hatchet Man's goin' into his act!"

BOSWELLISTER monand.
There it was, sailing in the
night sky, illuminated with soft
etherealness to give the proper
effect to these superstition-ridden
people. All they had to do was
glance up and accord to Ippling,
and they would be brought
gently, delicately into galactic
contact, opening out their narrow
ways into the broad ways of the

galactic universal worlds. With Boswellister to lead them. But he couldn't make the play. Not a head would tilt up. The TV cameras that-should be scanning the great lighted circle of the Ipplinger starship had swung to the entrance, waiting for the Hatchet Men.

And here he came, down the siste like a bot of Chinese lightning. He vaulted the repeated leaped to the tub, overturned it and was gone back up the aisle before the Blond Terror could retailate. Bath water sopped the piles of robes and made a measure of the bearskin rug but the ring attendants carted everything of, removed the waterproof canvas from the ring mat and presa from the ring mat and prepared to get the match underway. The Blond Terror paced in his corper, waving his hand mirror. challenging the Hatchet Man to quick, bloody death, And every few moments he'd stop to gaze admiringly into the mirror, running his hand along the edge of the solid band of light, grabbing all the credit for Ipplinger electronic science. He turned on one to give the TV audience a fullface closeup.

Boswellister cursed himself for choosing the Blond Terror, That cynical egocentric muscle artist was too pleased with himself to have any room in his thoughts for proper superstitious awe, and too stupid to recognize the superior science in back of the halo device. "Remove the device." Boswel-

lister ordered. There was no point in allowing it to stay, and that band of solid light, immovably in place on the wrestler's head made a perfect battering ram for headbutting maybem Boswellister paid no attention

to the gladiators-at-mat: he left his seat as soon as the device was removed and walked out onto Ventura Bouleyard. He went over his cultural equation, trying

to find the flaw. In the year he had spent on the preliminary survey, he had assessed this cultural equation to people's superstitions. He knew what to expect but comewhere the equation had been off. He should have chosen a quieter event, he guessed. The audience had been too well schooled in the acceptance of the spectacular. What was needed was a more acute contrast, and suddenly he

had it: the burlesque runway. He had watched it many times . . . and there was one girl, a bighodied blonde with mild eyes. He checked his watch and hur-

ried his pace. It was about time for Dodie's turn on the runway that extended out from the front of the gambling house. With satisfaction, Boswellister

called up the memory of Dodie's peel act. This would be a natural, and he couldn't think why he hadn't decided on it right away. IN many ways Dodie was a big

girl. In clothes she could never he the fashion ideal but she certainly made a good thing out of nakedness. Her soft, heavy, white breasts made old men blanch and young men start to grab. She was tall, with a narrow waist, flaring hips, long curvy legs and arms: with those hig, innocent blue eyes, wearing high heels and an ounce of flimsy, up mmm . . . Boswellister groaned.

the last decimal point of surety. She wouldn't date Boswellister He had absolute faith in there a second time no matter what he

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We admit it - we're pushovers for the Xmas spirit, "Don't do it," our accountant pleads. "We can't afford to sell subscriptions at those prices!" But our eye goes past his piteous figure to the distant corners of the land, "Readers straining budgets to introduce Galaxy to friends and relatives, and have enough scratch left over for their own subscriptions. We can't leave the job to them!" we thunder, "GALAXY must bear its share of the burden! And not only that - by the Lord Harry, we'll even include handsome Gift Card Announcements with their names as donors!" Out slouches our accountant, muttering, "All right, but they'd better get their orders in before December 15, --- so rush in your order today.

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promised, and his promises had included many things she'd never before heard of Boswellister squirmed momentarily

It was too bad there wasn't a better crowd. Most of the Boulevard's regulars were at the Arena opening, but there were a few loiterers, standing along the curb. watching the free show. And all he had to do was make a beginning. Boswellister felt He was sure that everything would roll by itself after that. He had faith in his superstition equation.

Dodie peeled. She seemed headed for complete nakedness at any moment, but to Boswellister's surprise, the revealing costume contained more pieces than he had remembered "Any moment now," he whis-

pered to the solido-tech. "Now. wait . . . there . . . that should be the last piece. Settle the device around her head," he ordered. Then he grouned and countermanded the order. He had remembered Dodie's details, not her act For at the last moment she slipped to the wings, dropning the last swatch of lace to slide down one long, white, outthrust leg.

Oh, blessed Ippling! There was his ship, floating majestically overhead, but no one would give it a glance. He pointed to it. These men must follow his excited gestures and look up; but

they were busy calling suggestions to the line of ponies who had taken over the runway. Boswellister felt as if he were standing in a desert, surrounded by a mob of phantoms from his own imagination.

The crying voice of the gambling-house barker rode in over the clang and brass of jazzy music. but he couldn't turn the tip. As soon as the line-girls left the overthe-sidewalk runway, the idlers moved on down the street to take in the next spot's free outdoor lure show.

Boswellister leaned against the wall and watched the barker wipe his sweat-soaked forehead. He felt kinship with the man in his failure. The manager came out and talked to the barker for a moment. Boswellister overheard: "Dodie didn't draw one customer. A buck ain't to be made these days."

The barker replied, shaking his head, "They're oversold, Marve, The give-away is all they want." Boswellister turned away and walked towards his motel. They wanted the give-away, but the glory of Ippling he had to give made no impression. He felt desperate. He had to make one more

try. His family position demanded obedience from the starship officers and crew. He stopped for a moment and gave a swift command into the lapel pick-up, then went on to his motel room.

THE next morning, full of confidence after a good breakfast, he headed for the intersection of Laurel Canyon and Ventura Boulevards, There he would make his stand.

The boulevard swarmed with women shoppers. Cars and trucks roared by. The spectacular signs and free lure show runways were closed down, for ballyhoo of a different character had taken

their place for the daytime.

Boswellister stopped for a
moment to watch a demonstrator

moment to watch a demonstrator work before a huge, block-long, glittering drugstore.

The demonstrator went into

his pitch:

"— money back, Now watch!

Into a wet glass I pour a small amount of medically tested Calsobisidine. See how the Calsobisi-

dine clings to the sides of the wet glass."

The pitchman smiled with flawless teeth and the women flawless teeth and the women was a simple of the side of the si

then and a trial sample bottle. Just for six ninety-five, plus tax.
"In the exact same manner,

Calsobisidine clings to the lining of your stomach and intestines, giving positive relief from hurning pain and acid indigestion." This puzzled Boswellister, and

he remarked in a voice that seemed overloud, "But who has glass insides?"

The women giggled and turned away.

The pitchman's scowl was a menace; his voice bitter: "Go on, scram. You queered my tip."

Bowellister slipped away while the picthman started to ollect a new crowd. He popped into the entrance of the drugstors of the drugstors and as always stood momentarily amazed by the bewildering variety of merchandise, Gardening implements, paper goods, dishes and glussware, whistey, Calsobiatine, a huge display of haby biddle that performed every human function hat reproduction.

Then he gasped and walked towards the inside demonstration. There, presided over by a fake medical man, dressed in operating room regalia, including mangle, rubber glowes and stethescope; there, right in the middle of the block-long drugstore, a demonstration of the newest education of the newest education doll was taking place. The doll, stretched out on a miniature hostial delivery table, was being delicated to the doll was taking place. The doll of the doll was taken to the doll was taken to the doll was taken place. The doll of the dollar dollar to the dollar the was being delicated to the dollar the doll

livered of a replica new-born in-

Again and again the "doctor" performed the delivery, alternately inserting the doll-baby into the doll-mamma and removing it. Boswellister flushed and

fant

walked quickly away. He had no doubt of the toy's educational value but nevertheless --- be sighed deeply

When Boswellister reached the corner of Ventura and Laurel Canyon he made his stand on the southeast corner, facing the hills over which the Ipplinger starship would come to hover over the intersection and be re-

vealed by him.

He contacted control and ordered the halo forms for his head He reached up and felt the circle. planted firmly over his brow. He smiled to himself and went into his nitch

66 TREOPLE of Earth," he began in a quavering voice, then he remembered the Calcobisidine demonstrator firmed up his tones and started again, "People of Earth! Listen to the message from the stars!" "Selling horoscopes," a woman

answered her child's question. "What's a horrorscope, mam-

ma2" "A bunch of booey," she snapped in reply, scowled at Boswellister and jerked her child

complainingly down the street bebind bos "People of Earth!" Boswellis-

ter stated commandingly. He grasped a man's arm, saving "Stand still a moment, friend, and hear the promise of Ippling, Glory beyond your imagination can be yours with the ascendancy of Inpling in this world of tears and SOFFORMS "

The man jerked away, "What the bell. Mac!" He looked searchingly at Boswellister and muttered. "Geez, a nut." He stood back from Boswellister to listen smilingly superior. tolerantly waiting to be entertained A woman dragging a toddler stopped, then several other people stopped to see until Boswellister had about ten people standing around him.

"People of Earth!" he started in again, but he was interrupted by a cackling voice from the rear. *Where elec?"

The small crowd laughed and started to move away, but Boswellister stood straight and commanded them, "Listen! Wait for a moment and learn your glorious destiny "Now," he said quietly into the

lanel nickup, and the great doughnut circle of the Innlinger starship sailed in close over the hills. A line of brush fire followed the

119

starship. Boswellister held up his hands and pointed. "Behold the glory of Ippling that can be yours!" He held onto the halo, trying to get them to follow the symbolism. "Look upwards!" He screamed at them, but they watched the brush fire that swept the hill top. It was a goodie. It would wipe out a number of homes.

He grabbed a boy by the arm and demanded, "Look at the Ipplinger starship. Behold the glory of Ippling!"

The ten-year-old sneered.

"Yah! That's the new 1993 Lock-heed X69-P37 experimental ship.

"No, no, lad! The Ipplinger starship, come to Earth to bring the blessings of Ippling's culture to his backwards planet. Ippling

will save you from wars and ills, from poverty and hatred. Ipplied will be your destiny. Follow me, Boswellister! Ippling will lead you to the stars! Glory for all!" Boswellister patted the boy on the head. "Keep your hands off me, you

big stiff!"

Boswellister gulped and pointed upwards, "See the Ipplinger

starship!"
"Aah! Shuddup!"

His mother jerked his arm in reproof, "How many times I've gotta tell you not to say, shuddup, Say, SHUT UP! S-H-U-T U-P!" "Aah!" the boy said in disgust. "Everybody knows starships are big rockets!" He'd said the final word; he had no more interest in Boswellister, for the fire engines were coming.

THEY sirened down Ventura

and turned up Laurel Canyou, their heavy motors, air horns
and sirens drowning out Boswellister's speech. Cars had piled
up at the intersection to wait for
the fire engines to make their
swing, and Boswellister leaped to
the middle of the intersection as
soon as the trucks had turned.
He held up his arms and went

into his People of Earth spiel again. But angry, blasting horns cut his voice to nothing. The drivers pressed close in on him, pinpointing him in the middle of the intersection. Shouts and jeers and horns; the roaring scream of fire engines; people running and shouting; Ventura at Laurel Canyon was a cacophonous meel-

A traffic officer screeched his copcycle to a halt and made his way to the center of the mass of tangled traffic. He blew his whistle and waved his arms, ordering Boswellister to the sidewalk, but Boswellister refused to move. He

had his mission on Earth.

Boswellister shouted over the
piled-up noise, waving his hand
to the sky, calling to them to fol-

low his lead to the glory of Ippling. The officer grabbed his coat collar and hustled him to the sidewalk, "You're under arrest!"

"You can't arrest me!" Boswellister squirmed and jerked away. He shouted, "Follow me!" and ran north, a good part of the crowd after him. He shrieked an order into the pickup while he ran over

the bridge towards Moorpark.

A woman spotted the Ipplinger starship that followed overhead.

"Free samples!" sile screamed, and those who had lagged behind fell into a run with the crowd following Boswellister.

The northwest corner of Laurel Canyon and Moorpark had been cleared of houses for the erection of a new billion-dollar shopping center, and the ground was smooth and bare. Here, in the center of the five-acre construction site, the Ipplinger starship

tion site, the Ipplinger starship settled to Earth.

The Ipplinger Supreme Starship Commander was panie-stricken. He had to rescue Boswelliter from that sample-seeking mob. If Boswelliter's should be trampled and injured! Each screamed demand, picked up by Boswelliter's lapir microphone, sent the Supreme Commander's blood pressure up another notich, but the promet search of the property of the p

coat close, forcing Boswellister to the
the rear as they screamed for their
tt[®] free samples. Two bulky crewwelmen stood embattled by the entrance port, strongarming the kids
ran who tried to storm through the
bod port and inside.

def "Spec Angel's inside!" That

was their battle cry as they tried to wriggle under the legs of the crewmen.

"Ya sellin' Oatbombs?" one

"Ya sellin' Oatbombs?" one screamed in the commander's ear, then reached up to snatch off a shoulder patch. Rossellister stood in the rear

Boswellister stood in the rear of the crowd and wrung his hands while the crowd clamored for their samples. "Give us the pitch, then pass

out the stuff!"

"Lookit that ship! Ain't it a
dilly! Whatcha sellin', Wheat-

"Bring on the dames!"

THEY pressed in close to the starship, running their hands over the slick metal surface. "Boy, what a prop! Bet it cost a million backs, What ye selling."

"Sanity!" Boswellister shouted from the rear.

His men tried to hold their ranks, but the crowd broke the lines, jerking the medals off their chests for souvenirs.

lined up to pipe Boswellister Boswellister was almost bababoard. But the crowd pushed in bling by the time the commander and his men battled their way to him.
"You saw it all! You know!"

"You saw it all! You know!" Boswellister protested. "That Blond Terror and his harem dariings, and those violence-avid ruffians in the audience! Dodie, the stripper, with her lip-licking ogglers! That Calsobisidine pitchman, ozring allure and implied invitation! My quattion! My precious equation, buried under a mass of rills, lottors, twos. food.

clothes and everything sold with a bump and grind!"
They fought to the ship with him, while the crowd opposed each step, yelling for entertainment, for TV cameras, for samples of anything.

"How could I have missed it?"
Boswellister moaned. "I should have sold them with sex, right from the beginning."
"What do you do, handsome?

Sing?® A bundle-clutching housewife breathed into his face, stepping on the commander's foot as she shoved in close to Boswellister.

"Take me home!" Boswellister beseeched the commander.

beseeched the commander.
The officers and crew, tattered,
demedaled, bruised and completely defeated in morale,
formed a flying wedge and drove
for the safety of the ship.
The ramp retracted. The port
closed, then opened briefly to
eject a nosey boy, closing finally

on the demands and the mocking laughter and the clangor of arriv-

"Raise ship!" the commander ordered. He sopped at the blood from his gashed arm and said to his first officer, "Somebody in that mob used a knife to go after those

mob used a knife to go after those service stripes."

The first shuddered. "Ugly

brutes."

Boswellister leaned against the corridor bulkhead and sighed as the Ipplinger starship rose from the ground. How could be explain to his poppa? All his brothers had won their worlds. He would do it. He squared his shoulders. After all, he was a Boswellister. Borwells.

hroldshan IX himself, the Prince of Ippling World LXIV, a Royal Prince of the Central Ippling. He walked resolutely to the control room, riding the crest of his refurbished dienity.

"Put me down on that planet we spotted last year," he ordered. "What was that star map num-

"G.S.R. 285139-F. R. A. 592-105-R.U. 13," his alert assistant astronomical officer answered, reading the number from a prepared memorandum.

pared memorandum.

Boswellister hesitated. Should he reprimand the officer for anticipating his failure or compliment him for his efficiency? Boswellister, backed water, and went

to his room to learn the language he'd need, while the officers pulled their own demoralized spirits together so they could go to work on the crew when the news broke that they weren't going home

THEY made a quick passage to their destination, and Boswellister - well rested, well fed, hypnotically tutored, supplied with communicators a synthesizer for his food and a portable equation writer strapped to his back, and his irrepressible, dauntless belief in himself in triumphant operation - stepped from the ramp onto this newest world of his Princely destiny. "Circle in orbit," he ordered,

"Til call you when I need you." Boswellister walked dently down the road to town He congratulated himself on having learned, also on his wise humility in admitting the fact of his having learned. He smiled now at the naiveté with which he had approached his first try at establishing a realm for his Ipplinger Princedom rights.

He had been so full of illusions that he had landed openly, had stepped right up and announced that he had come to establish his household and rear his own Princes, who would, in their maturity, leave to win their own worlds. In addition to their being smallhousehold, they had nearly managed to commit him to a lunatic asylum, for he had overlooked, in his equation, the fact that his first planet, with its two suns and nerpetual daylight, had never known about the stars. There had been no way to break through their

minded on that first world about

his needing five wives for his

wall of stupidity, and he had left. the planet's sanity-police close on his heels. Had he used money it would have been a cinch, he had realized as soon as he was safely in the ship. That hard-earned lesson he had applied to his second planet.

but there superstition meant more than money, though money had seemed on the surface to be the answer to everything. On that second planet he had made the error of buying his way into the half-political, half-religious temple setup and had tried to bring the local superstitions into line with Ipplinger Reality Philosophy. They had lost an officer and three men when they rescued him from the temple's torture chamber: and none too soon, for he

had been taking quite a stretching when his rescue had arrived. Applied on Earth, the superstition equation had not paid off, He had failed to notice that they didn't really believe in their religions and superstitions, though they showed every indication of

123

being extremely devout and credulous. He should have sold Earth. and sold it with say

Well, he had learned, all right, and here, on this new world, in this fresh start he would show how well be had learned. In the idiom of Ventura Boulevard, he'd hit 'em with the whole deck. deuces wild. He'd give 'em sex and money and superstition and to hell with fact and logic.

These primitive worlds had to be brought slowly into a respect for logic: for Inclineer logic the only valid system of logic in the whole universe.

In the hovering ship, the commander turned to the astrogator and said, with the bitterness of vesterday's conflict with the mutinous crew evident in his voice, "Well our little vaporized circuit is off again." He motioned to the image of Boswellister in the forward viewscreen.

It was a sight that tended to increase the tremor in the astrogator's hands. He replied, "I only hope we can pull the crew through another pickup, Home and family! Do they think I want mine any less?"

Boswellister marched confidently down the road. He would succeed, for didn't he have the well oiled machinery of the whole Ipplinger starship crew of cultural contact specialists to back him up?

WHILE he walked, he practiced the strident-voiced delivery of extravagant lies he had learned so well and had so magnificently imitated from the Ven-

tura Boulevard pitch artists. He practiced the leering insinuendo of the barker outside the gambling hall he gave it the Calsohisidine con come on be sold it solid, dripping with sex, twitching with lure. He knew that here, finally, he

would succeed. Boswellister XIV. Noble Prince of Ippling, smiled his confidence in his sex-money-superstition equation as he walked briskly down the road to begin his contact with a world that had substituted vat-culture procreation for sex: that had abolished money in favor of a complicated system of verbal, personal-honor swapping credits: that had no religions of superstitions. A world of people who considered the most sweetly distilled essence of living to be the minute investigation of the fine points of logical discourse engaged in on the basis of an incredibly multiplied logic

structure composed of thirtyseven separate systems of discursive regulations, the very first of which was based on a planetary absolute, the rejection and ridicule of all persuasive techniques and those who used them HELEN M LIDBAN

GALAXY



space-station project been given up?" or even, "Do we still need a space station?" At first I merely answered the question, asserting that a space station is still considered useful and that it will be built when the

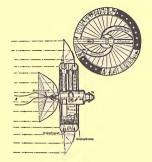


Fig. 1. Noordung's Space Station (1928)
The word Treppenschacht means "stainwell", Aufzugschacht mean
"elevator shaft", Verdampfungsrohr means "boiler tube" an
Kondensatorrohre means "condenser tubes".

time is sine After a while I hegan to wonder why this question came up with such monotonous regularity and I began to ask hack

It turned out that not everybody who esked that question had the same reasons. One would be motivated by the belief that rocket engineers had changed their plans and wanted to do everything with direct takeoff from Earth Somehody else had swallowed the statement, made by some people that "instruments are much lighter than men and can do things no man could do, like detecting X-rays." And others just read a meaning into what might be called an absence of publicity; since the newspapers and magazines had talked about nothing but boosters, instrumented satellites and Mercury capsules for more than a year, the space-station project had most likely been given up. Of course it isn't so.

If NASA, and with it newspapers, magazines, radio and TV. is talking mainly about instrumented satellites and boosters and so forth, it is talking merely about the things now at hand. Instrumented satellites are being sent up at fairly regular rate. By December 31, 1961 there had been a total of 74 successful satellite shots (USA 61, USSR 13) and 5 shots to and past the moon

(IISA 2 IISSP 3) Orbital flights have been made by both sides and the program to make the hig Saturn hooster operational is under way. The space station is still a few years in the future. And before we can so shead and build it a few other things have to be done first

THERE are mainly two things space station project can become active. One is to have a large reliable booster namely the Saturn. On its first test flight the Saturn since all the upper stores were merely dummies, carried —which gives a fine indication of what it can lift As now planned. the Saturn will be able to put 20,000 pounds into a 300-mile orbit. But if the upper stages which are now under development should turn out a little better than expected - let's say, if they turn out as well as hoped that payload may turn out to be ten per cent higher. This will

The second thing that must be done before the space station can be tackled is the solution of the so-called rendezvous problem. The space station, once it exists. cannot survive unless the rendezyous problem has been solved. even if the whole station was car-

take care of the necessary load-

carrying capacity.



ried into orbit in one piece. A space station is, by definition, a manned satellite. The crew inside must be both relieved and supplied. Even if he had a rather small space station with a crew of only eight men in mind, these men must be relieved from time to time. Let us say than a strekl of duty would be six weeks; we need a supply ship which can carry four men plus supplies every three weeks.

The rendezvous problem, which is the physical contact between two vessels both of which are orbiting the earth, is going to be attacked during 1963. (At the moment of writing no date has been set.) But it is very likety that the Gemini capsule for two astronauts will play a role in the rendezvous problem.

The two unfinished items -

the big booster for carrying heavy loads, and the rendezvous program, for equipping, supplying and maintaining the space station — are the reason why the space station isn't much in the

news right now.

But that does not mean that nobody is thinking about it.

nobody is thinking about it.

In fact we are now in the fourth phase of the thinking about the space station.

about the space station.

The first phase was way back in 1923, when Professor Hermann Oberth introduced the concept into scientific literature. He did not describe a specific space

ying station, however; he only sugstagested how it might be done. His the idea ran as follows: put a very

large rocket ship equipped with a "landing boat" into an orbit around the earth. Have the man who put the ship into orbit return to the ground with his landing boat. And then add to the space station with successive flights, until it has become an or-

bital base.

The second phase followed five years later, when an Austrian retired officer, originally a captain

Fig. 3. 24-foot model of an expandable space station (Courtesy Goodyear Aircraft Corp.)



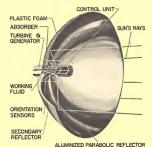


Fig. 4. A non-rigid solar collector with turbo-generator.

in the Austrian army's Engineer Corps, published a book on space travel which was mainly devoted to a description of the space station as he conceived it. Captain Purchasik, who works under the

pen name of Hermann Noordung, had a three-body space station in mind. There were two auxiliary bodies, the astronomical observatory and the power house, and the main one which be called the Wohnad (Living Wheel), See Fig. 1. It was a circular structure with living quarters in its rim. Of course it was supposed to rotate so that the crew would be under pseudocgravity (actually centrifugal force) and because it rotated the wheel was to be entered by the hub. Curved mirrors for catching the sun's rays were to provide power. "Herman is thing, and he also made a numthing, and he also made a num-

her of mistakes but his was the

first design for a permanent space station and his main suggestions have been in all subsequent designs.

One interesting fact which might be useful to mention is that some of Noordung's concepts appeared in subsequent designs although the originators of these designs did not even know that his book existed. It just proves that solutions to given problems are bound to turn out the civilians of the control of

Fig. 5 Building of a large expandable space station. The two deltawinged ships are re-entry vehicles. (Courtexy: Goodyear Aircraft Corp.)



THE third phase came in 1952, when Collier's Weekly decided to devote most of one issue to

The central theme of the issue was Wernher von Begun's spacestation concept One interesting result of the circumstances was that every one of the participating scientists was forced to think about things which he would normally have postponed. The scientific conference which Collier's Weekly had called at my suggestion had the primary purpose of producing something that the magazine could publish . . . which meant that many things that had been stated before in rather general terms had to be stated in definite terms for the purpose of being painted and described. I'll von Braun had stated earlier that the space station would derive the power needed by the concentration of solar radiation "fueling" a turbo-generator, Now he --- or rather we, the conference - had to think of the shape and arrangement of the mirror so that Chesley Bonestell could paint it, and you Braun also had to make calculations so that the overall weight of the mirror and turbo-generator could be mentioned. I had stated (as had everybody else) that the crew of the space station would be relieved at intervals; now I had to think about a whole housekeeping schedule, from crew replacement to garbage removal, taking the assumed size of the station and the carrying capacity of yon Braun's assumed cargo carriers as

the starting point. The final outcome of all the deliberations was a ring-shaped station with a circular troughshaped mirror for collecting solar radiation. In these two respects it resembles Noordung's Wohnrad, but the concept contained many things that Noordung had never dreamed of There was an automatic stabilizing system which operated by pumping water from one sector to another to offset the effects of crew members walking around. The skin of the station automatically assumed to be metal by Noordung. had turned into a plastic reinforced by nylon threads or stainless steel wires. This made it possible to collapse the sections for transporting them into orbit. In addition to general refinement. a sheet-metal "meteor bumper" had been added to absorb the impact of micro-meteorites.

The fourth phase is now.

Now big rockets no longer need to be assumed, they exist While the date of the first experimental space station is still in the future it is now a near future of less than half a dozen years. And now industry is thinking about

the problem. One might say that the thinkers are no longer people of a theoretical bent who point out what should be possible. The thinkers are people who hope for

a contract Of course there are several designs around in the United States and there can be little doubt that there are similar designs around in the Soviet Union Some of the current designs visualize a structure similar to that of a Zeppelin-type airship consisting of circular girder type rings for the end of each section. spaced apart by lightweight metal beams. The airtight plastic cover is then to be draped over this metallic skeleton But Goodyear Aircraft has evolved another design, one which seems an echo

FEEL a rather remote personal interest in structures of this type, one which needs some backtracking in time to explain One of my earliest memories is seeing one of the airships built by Count Ferdinand von Zeppelin circling over Berlin, A few years later I was taken out to a remote suburb to see an airship on the ground. It was one that also bore the name of its designer: Major Parseval, Many years later I was one of the men who founded the rocket-proving

airship we once had the blimp

ground in a nearby suburb of Berlin.

It took me over a year to realize that the remote suburb of my childhood and the nearby suburb of my early manhood were one and the same, and that we were building our early liquid fuel rockets in a corner of the tract of fields and copses which had served Major Parseval. By that time I had also learned to what extremes Major Parseval

had gone in his design.

In a desire to produce an airship which could be loaded on a truck (and the trucks of that period were not very large) he had not only done without a skeleton, he had not only designed and built a collapsible gondola, he had even produced of the other type of lighter-thancollapsible propellers. His propellers were strips of cloth attached to a hub. Their ends were curved pieces of steel, so that the propeller acquired its shape by the centrifugal force of these curved steel pieces, when the engine spun the propeller. (The only thing Major Parseval could

not collapse, although he probably tried, was the engine.) I was reminded of all this by seeing that Goodyear's space station is not only completely collapsible - they call it "expandable" - but that even their solar reflectors are not rigid! The reason why these structures are called "expandable" instead of collapsible is that, eleast in one version, they cannot be collapsed again once they have been expanded. The design works with quick-setting plastic foam which will be injected into the space between an inner and outer skin. Or else there may be how-like "stiffeners".

Work on a model of this type

Indubitably there will be changes as experimentation progresses. There might even be changes in concept in some areas of the design. If, for example, during the next two years while the Saturn is proved out as reliable and a rendezvous technique is being evolved - an atomic reactor of high energy output, light overall weight and proven reliability is developed. the time-honored solar collector and turbo-generator system may be abandoned But only if kilowatt-hour for kilowatt-hour, the atomic reactor is considerably lighter. If it is only a little lighter the consideration that solar radiation comes free of charge while heavy isotopes cost money will still win out

The first experimental space station is likely to be rather small. But a larger one is in the future.

The concept of the space sta-

tion has not been given up.

QUESTIONS AND ANSWERS

If "perigee" means the point of an orbit closest to Earth and "perihelion" means the point of an orbit closest to the sun (with "apogee" and "aphelion" being their opposites) what words should one use for the point closest to another plane?

Selma Felicitas Montez Regina Nubili, Argentina When I taught at Fairleigh

Dickinson University in New Jersey I used to say that my best students were married women who went to college because they wanted to, not because father said so. I'll now amend this statement to say that female students have a talent for asking especially difficult questions. When Johannes Kepler coined

the word perihelion, etc., he used the Greek name (Helios) of the sun, not the Latin (Sol) or the German (Sonne): likewise for Earth he used the Greek gains derer multing over this letter, and even calling on friends for help, I know why, If you try to do it with the Latin names you get rather clumsy constructions. Before I go into the problem let really be periesgon, and in some

languages this form, or one close

to it, is used. Likewise the term

peri-astron (from Greek aster for star) for closest approach to a star, for example by a comet, is astronomical usage. Of course the term is rarely used. The concept is not needed often.

Now let's go to work. If you use the Greek name for Mercury, Hermeias, you get a reasonable word for the equivalents of perigee and aprogee, namely peri-hermeion and apohermeion. The latter might be contracted to anhermeion, following the example of aphelion for apo-helion. The next planet. Venus, is a little more of a problem. Using the Latin name Venus always works out clumsilv in English, partly because "of Venus" is veneris which is misleading, to say the least, But we have a choice of classical names for Venus. One of them is Hesperos which would produce peri-hesperon and apo-hesperon. Again the latter might be contracted into aphesperon,

Our own moon poses a problem which is not only linguistically troublesome but fairly urgent. We'll need these terms soon! The Latin name is course Luna, the Greek is Selene (three syllables, pleasel) and the better choice again seems to be the Greek, giving us peri-seleneion (peri-selenon) and apo-seleneion (apo-selenon.) Mars (Greek: Ares) presents no difficulties.

The terms would be peri-areion (peri-areon) and apo-areion (apo-arcon.)

As for the outer planets the terms may sound somewhat clumsy but do not present any special difficulties. For Saturn the Latin name works out better, e. g. peri-saturnium. Uranus is Greek to begin with and the Greek ending would be preferable since the Latin form would be peri-uranium which might cause misunderstandings. In the case of Neptune one could use this Latin form, or else go to the Greek equivalent Poseidon.

is threefold. Neither the Latin Jupiter nor the Greek equivalent Zenus produce very elegant terms Moreover because of work on the orbits of Jupiter's numerous moons, a term for the closest approach is already heing used. It is perijove, hardly pretty but, under the circumstances, the least of three possible evils.

The reason I left out Jupiter

In reality future astronauts will probably say "my closest approach was so and so many miles." Or else, since on a chart the closest approach is always designated by the Greek letter pi, they may avoid words like peri-kythereion by saving that they are approaching the pi position.

-WILLY LEY

The world was smashed like a spoiled child's plaything now Chandler was in the very presence of the destroyers!

By FREDERIK POHL
Illustrated by RITTER

PLAGUE OF PYTHONS



CONCLUSION

On Chrismas He world's freedom died. Evey non, women and did loy in the gips of fer, for no can know or what mement his necreal friend or a council stronger might suddenty. Be passessed by sone brained mind, a out begin to murder and destroy, for Choudler it wer worse then for most. He was knot victim and executioner. He had utilized himself and be had committed a violent crime while under the stronge deninosion. According of bloosing he was driver from his home. He wondered will be found himself in Howell and Home of the world had been designed and the low to begin as the anything obsert it is the world had been to the only the high propage. The second had been a second or the world propage and that he was beginned to the only high passes.

7

A PINK and silver bus let Chandler off at Fort Street in downtown Honolulu and he walked a few blocks to the advers he had been given. The name of the place was Parts in Plenty. He found it easily enough It has a few been been been been been but now the been been but now here there is but now here been to be counters were almost bare.

A thin-faced man with khakicolored skin looked up and nodded. Chandler nodded back. He fingered a bin of tuning knobs, hefted a coil of two-strand antenna wire and said, "A fellow

at Tripler told me to come here to pick up equipment, but I'm damned if I know what I'm supposed to do when I locate it. I don't have any money."

don't have any money."

The dark-skinned man got up
and came over to him. "Figured
you for a mainlander. No sweat.
Have you got a list?"

"I can make one."

"All right. Catalogues on the table behind you, if you want them." He offered Chandler a cigarette and sat against the edge

cigarette and sat against the edge of the counter, reading over Chandler's shoulder. "Ho," he said suddenly. "Koitska's squarewave generator again, right?" Chandler admitted it, and the man grinned. "Every couple months he sends somebody along. He doesn't really need the generator, you know. He just wants to see how much you know about building it. Mr. — ?"

"Chandler."

"Glad to know you. I'm John
Hsi. But don't go easy on the job
just because it's a waste of time,

Chandler, it could be pretty important to you."

Chandler absorbed the infor-

Chandler absorbed the information silently and handed over his list. The man did not look at it. "Come back in about an hour," he said.

"I won't have any money in an hour, either."

"Oh, that's all right, I'll put it on Koitska's bill."

Chandler said frankly, "Look, I don't know what's going on. Suppose I came in and picked up a thousand dollars worth of stuff, would you put that on the bill, too?"

"Certainly," said Hsi optimistically. "You thinking about stealing them? What would you do with them?" "Well..." Chandler puffed on

his cigarette, "Well, I could—"
"No, you couldn't. Also, it
wouldn't pay, believe me," Hsi
said seriously. "If there is one
thing that doesn't pay, it is cheating on the Exec."

"Now, that's another good question," said Chandler. "Who is the Exec?"

Hsi shook his head. "Sorry. I don't know you, Chandler." "You mean you're afraid even to answer a question?"

"You're damned well told I am. Probably nobody would mind what I might tell you . . . but 'probably' isn't good enough."

Exasperated, Chandler said, "How the devil am I supposed to know what to do next? So I take all this junk back to my room at Tripler and solder up the gen-

art Tripler and solder up the generator — then what?"

"Then Koitska will get in touch with you," Hsi said, not unkindly.

with you," His said, not unkindly, "Play it as it comes to you," Play it as it comes to you. I can offer," He hesitated, "Koits-kas' not the worst of them," he said; and then, darnigh, "and maybe he's not the best, either, Just do whatever he told you. Keep on doing it until he tells keep on the said; and then darning to make the said; I can give you. Whether it's going to be enough to saitify Koitaka is something elebe again."

THERE is not much to do in a strange town when you have no money. Chandler's room at what once had been Tripler General Hospital was free; the bus was free; evidently all the radio parts he could want were also free. But he did not have the price of a cup of coffee or a haircut in the nockets of the suntan slacks the desk man at Tripler had issued him. He wandered around the streets of Honolulu, waiting for the hour to be up.

At Tripler a doctor had also examined his scar and it was now concealed under a neat white bandage; he had been fed; he had bathed; he had been given new clothes. Tripler was a teeming metropolis in itself, a main building some ten stories high, a scattering of outbuildings connected to it by covered passages, with thousands of men and women busy about it. Chandler had spoken to a good many of them in the hour after waking up and before boarding the bus to Honolulu, and none of them had

been free with information either. Honolulu had not suffered greatly under the rule of the Exec. Remembering the shattered stateside cities. Chandler thought that this one had been spared nearly all the suffering of the rule of the world by the Exec. whoever they were. Dawdling down King Street, in the aromatic reek of the fish markets Chandler could have thought himself in any port city before the grisly events of that Christmas when the planet went pos-sessed. Crabs waved sluggishly at him from bins. Great pink-scaled fish rested on nests of ice, waiting to be sold. Smells of frying food came from half a dozen restaurants. It was only the people who were different. There was a solid sprinkling of those who, like himself, were dressed in insigneless former Army uniforms - obviously conscripts on Exec errands - and a surprising minority who from overheard snatches of conversation, had come from countries other than the U.S.A. Russian mostly. Chandler guessed: but Russian or U.S., wearing suntans or aloha shirts, everyone he saw was marked by the visible signs of strain. There was no laughter

Chandler saw a clock within the door of a restaurant; half an hour still to kill. He turned and wandered up, away from the water, toward the visible bulk of the hills; and in a moment he saw what made Honolulu's collective face wear its careworn frown.

It was an open square — perhaps it had once been a war memorial — and in the center of it was a fenced-off paved area where people seemed to be resting, It struck Chandler as curious that so many persons should have decided to take a nap on what surely was an uncomfortable bed of flat concrete; he approached and saw that they were not resting. Not only his eyes but his earn to rest on the contract of the contract o



unconscious: all maimed. The pavement was slimed with their blood. None had the strength to scream, but several were mosning and even some of the unconscious ones gasped like the breathing of a man in diabetic coma, Passersby walked briskly around the metal fence, and if their glances were curious it was at Chandler they looked, not at the tortured wrecks before them. He understood that the sight of the dying men and women was familiar - was painful - and thus was ignored: it was himself who was the curiosity, for staring at them. He

returned to Parts 'n Plenty. The hour was up but Hsi shook his head. "Not yet. You can sit down over there if you like." Chandler slumped into the indicated swivel chair and stared blankly at the wall. This was far worse than anything he had seen stateside. The random terror of murders and bombs was at least a momentary thing, and when it was done it was done This was sustained torture. He buried his head in his hands and did not look up until he heard the sound of a door opening.

TE WAS still shaken when he



This is the desired power university, which is a considered with the control of t

The man inside wheeled out two shopping carts loaded with electronic equipment of varying kinds, wordlessly received some empty ones from Hsi; and the door closed on him again. Hsi tugged the lever down, turned, blinked and said, "All

right, Chandler. Your stuff's here."

Chandler approached. "What was that all about?"

s that all about?"
"Go to hell!" Hsi said with

sudden violence. "I — Oh never mind. Sorry. But I told you already, ask somebody else your questions, not me." He gloomily began to pack the items on Chandler's list into a cardboard carton. Then he glanced at Chandles and said, apologetically, "These are tough times, buddy. I guess there's no harm in answering some questions. You want to know why most of my stock's locked behind a more-plate door? Well, you ought to be able to figure that out for yourself, anyway. The Exec doesn't like to have people playing with radios. Best stays in the stockroom; I stay out here; twice a day the bosses open the door and we fill whatever orders they've approved. A little rough on Best, of course. It's a ten-board say in the stockroom for him, and nothing to do Best in the stockroom for him, and nothing to do But it could be worse. Oh

that's for sure, friend: It could be worse."
"Why the bathing suit? Hot in there?"
"Hot for Bert if they think he's smuggling stuff out." said Hsi.

"You been here long enough to see the Monument yet?" Chandler shook his head, then grimaced. "You mean up about

grimaced. "You mean up about three blocks that way? Where the people --- ?"

"That's right," said Hsi admir-

ingly, "three blocks mauks from here, where the people — Where the people are serving as a very good object lesson to you and me. About a dozen there, right? Small for this time of year, Chandler. Usually there are more. Notice anything special

about them?"

"They were butchered! Some of them looked like their legs had been burned right off. Their eyes gouged out, their faces —"

c's Chandler brought up sharply. It that been bad enough looking at those wretched, writhing semitif, cadavers; he did not want to talk to about them.

The parts man nodded seriously. "Sometimes there are more, and sometimes they're worse burt than that. Have you got any idea how they get that way? They do it to themselves, that's how. My own brother was out there for a week, last Statehood Day. He jumped feet first into a concepts mixer and it took him seven days to die after I put him on my shoulder and carried him out there I didn't like it of course but I didn't exactly have any choice: I ween't sunning my own body at the time. Neither was he when he jumped He was made to do it because he used to have Bert's job and he thought he'd take a little short-wave set home Like I said, you don't want to cheat on the Exec because it

"But what the devil am I supposed to —"

Hsi held up his hand. "Don't

doesn't nav."

ask me how to keep out of that Monument bunch, Chandler, don't know. Do what you're told and don't do anything you aren't told to do; that is the whole of the law. Now do me a favor and get out of here so I can pack up these other orders." He turned his back on Chandler. BY THE morning of the fourth day on the island of Oshu Chandler had learned enough of the ropes to have signed a moneychit at the Tripler currency office against Koitska's account.

against actions a sociol at the had learned, except for a few practical matters like where meak were metters like where meak were metters like where meak were metters like where meak were fresh-water seismning pool at the back of the grounds. He was kill-ling time using the pool when, in the middle of a jacknife from the ten-foot board, he feet himself seized. He spraweld into the water with a hard splashing slap, threshed about and, as he came to the surface, found himself gis-eline.

"Sorry, dear," he apologized to himself, "but we don't carry our weight in the same places, you know. Get that square-what'sit thingamajig, like an angel, and meet me in front by the flagpole in twenty minutes"

in twenty minutes."

He recognized the voice, even
if his own vocal chords had made
it. It was the girl who had driven
him back from the interview with
Kotiska, the one who had casualby announced she had saved his
life at his hoaving trial. Chanlier swam to the side of the pool
and toweled as he trotted toward
his quarters. She was from Koitska now. of course; which meant

that his "test" was about to be graded. Quickly though he dressed, she was there before him, standing

heside a low-dimg aports cer and chatting with one of the groundskeepers. An armful of leis dangled beside her, and although she wore the coronet which was evidence of her status the gardener did not seem to fear her. "Come along, love," she called to Chandler. "Koitska wants your thingammy, Chack it in the trunk if wikiwiki, Don't I say that nicety? But J only fool the mallihinis,

like you."

She chattered away as the little car dug its rear wheels into the drive and leaped around the

green and out the gate. The wind howled by them, the sun was bright, the sky was piercingly blue. Riding next to this beautiful girl, it was hard for Chandler to remember that the was one of those who had destroved his world. It was a terrible thing to have so much batred and to feel it so diluted Not even Koitska seemed a terrible enough enemy to accept such a load of detestation; it was hate without an object, and it recoiled on the hater, leaving him turgid and constrained. If he could not hate his onetime friend Jack Souther for defiling and destroying his wife, it was almost as hard to hate Souther's anonymous possessor. It could even have been Koitaka. It could even have been this girl by his side. In the strange, cruel fantasies with which the Execs indulged themselves it was likely enough that they would sometimes assume the body, and the role, of the opposite sex. Why not? Strate opposite sex. Why not? Strate sible to realuse it by any human

standards

It was also impossible to think of hatted with her beside him. They soared around Honolulu on a broad expressway and paralleled the beach toward Walkitsi. Took, dear. Diamond Head Mustn't ignore it — very bad form — like not going to see the night-blooming cereus at the Punahou School. You haven't missed that, here you?"

"Rosalie. Call me Rosalie,

"I'm afraid I have, Rosalie."
For some reason the name sounded familiar

"Shame, oh, shame! They say it was wonderful night before last. Looks like cactus to me, but —" Chandler's mental processes had worked to a conclusion. "Rousile Pan" he said "Now I

"Rosalie Pan!" he said. "Now I as they stopped before the TWA know!" message center, a few moments whe swerved around a motionless been fun. Go on in; Koitska's ex-Buick, parked arrogantly five pecing you. Fil see you later."

y- feet from the curb — "you mean you didn't know who I was? And on to think I used to pay five thoulin sand a year for publicity."

Chandler said, smiling, and almost relaxed, "I'm sorry, but musical comedies weren't my strong point. I did see you once, though, on television. Then, let's see, wan't there something about you disappearing —"

She nodded, glancing at him.
"There sure was, dear. I almost froze to death getting out to that airport. Of course, it was worth it, I found out later. If I hadn't been took, as they say, I would've been dead, because you remember what happened to New York about an hour later."

"You must have had some friends," Chandler began, and let it trail off. So did the girl. After a moment she began to talk about the scenery again, pointing out the brick-red and purple bougainvillea, describing how the shoreline had looked before they'd "cleaned it up," "Oh, thousands and thousands of the homeliest little houses. You'd have hated it. So we have done at least a few good things, anyway," she said complacently, and began gently to probe into his life story. But as they stopped before the TWA message center, a few moments And her eyes added gently: I hope.

CHANDLER got out of the car, turned . . . and felt himself taken. His voice said briskly, "Zdrastvoi, Rosse. Gd'yeh Koitska?"

ka2"
Unsurprised the girl pointed to

the building "Kto govorit?"
Chandler's voice answered in
English, with a faint Oxford accent: "It is I, Rosie, Kalman.
Where's Kotiska's tinkertory? Oh,
all right, thanks; I'll just pick it
up and take it in. Hope it's all
right. I must say one wearies of
breaking in these new fellows."

Chandler's body ambled around to the trunk of the car, took out the square-wave generator on its breadboard base and slouched into the building. It called ahead in the same language and was answered wheetily from above: Koitka. "Zdrastvoi. Iditye suda ko mmeh. Ko. Kalman?"

"Konyekhno" cried Chandler's voice and he was carried in an up to where the fat man lounged in a leather-upholstered wheel-chair. There was a conversation, long minutes of it, while the two men poked at the generator. Chandler did not understand a word until he spoke to himself:

"You — what's your name."

"Chandler," Koitska filled in.

"You, Chandler. D'you know anything at all about submille.

meter microwaves? Tell Koitska." Briefly Chandler felt himself free — long enough to nod; then he was possessed again, and Koitska repeated the nod. "Good, then. Tell Koitska what experience you've had." Again free. Chandler said. "Not

a great deal of actual experience.
I worked with a group at Caltech
on spectroscopic measurements
in the million megacycle range.
I didn't design any of the equipment, though I helped put it together." He recited his degrees

until Koitska raised a languid hand.

"Shto, I don't care. If ve gave you diagrams you could build?"

"Certainly, if I had the equipment I suppose I'd need ..."

ment. I suppose I'd need —"
But Koitska stopped him
again. I't know vot you need," he
said damply. "Enough. Ve see."
In a moment Chandler was taken
again, and his voice and Koitska's debated the matter for a
while, until Koitska shrugged,
turned his head and seemed to
so to sleen.

Chandler marched himself out of the room and out into the driveway before his voice said to him: "You've secured a position, then. Go back to Tripler until we send for you. It'll be a few days, I expect."

And Chandler was free again. He was also alone. The girl in the Porsche was gone. The door itself behind him. He stared around him, swore, shrugged and circled the building to the parking lot at back, on the chance that a car might be there for him to borrow

Luckily, there was There were four, in fact, all with keys in them. He selected a Ford pursled out the likeliest road back to Honolulu and turned the key in

the storter

It was fortunate, he thought, that there had been several cars: if there had been only one he would not have dared to take it, for fear of stranding Knitska or some other exec who might easily blot him out in annovance. He did not wish to join the wretches at the Monument

It was astonishing how readily fear had become a part of his tife

The trouble with this position he had somehow secured - one of the troubles - was that there was no union delegate to settle employee grievances. Like no transportation. Like no clear idea of working hours or duties Like no mention at all - of course of wages. Chandler had no idea what his rights were, if any at all, or of what the penalties would be if he overstepped them The maimed victims at the

Monument supplied a clue, of

course. He could not really be-

of the TWA building had latched lieve that that sort of punishment would be applied for minor infractions Death was so much less trouble Even death was not real-Iv likely, he thought, for a simple Innea

He thought

He could not be sure of course He could be sure of only one thing: He was now a slave completely a slave, a slave until the day he died. Back on the mainland there was the statistical likelihood of occasional slavery-bypresssion, but there it was only the body that was enslaved and only for moments. Here in the shedow of the execs, it was all of him, forever, until death or a miracle turned him loose

ON THE second day following he returned to his room at Tripler after breakfast, and found a Honolulu city policeman sitting hollow-eved on the edge of his bed. The man stood up as Chandler came in "So," he grumbled, "you take so long! Here. Is diagrams, specs, parts lists, all. You get everything three days from now, then we begin."

The policeman, no longer Koitska, shook himself, glanced stolidly at Chandler and walked out, leaving a thick manila envelope on the pillow. On it was written, in a crabbed hand: All secret! Do not show diagrams!

Chandler opened the envelope

and spilled its contents on the

hed An hour later he realized that sixty minutes had passed in which he had not been afraid. It was good to be working again, he thought and then that thought foded away again as he returned to studying the sheaves of circuit diagrams and closely typed pages of specifications. It was not only work, it was hard work, and absorbing. Chandler knew enough about the very short wavelength radio spectrum to know that the device he was supposed to build was no proficiency test; this was for real. The more he puzzled over it the less he could understand of its purpose. There was a transmitter and there was a receiver. Astonishingly, neither was directional: that ruled out radar. for example. He rejected immediately the thought that the radiation was for spectrum analysis. as in the Caltech project - unfortunate, because that was the only application with which he had first-hand familiarity; but impossible. The thing was too complicated. Nor could it be a simple message transmitter—no. perhaps it could, assuming there was a reason for using the submillimeter bands instead of the conventional, far simpler shortwave spectrum. Could it? The submillimeter waves were lineof-sight, of course, but would

ionosphere scatter make it possible for them to cover great distances? He could not remember Or was that irrelevant, since perhaps they needed only to cover the distances between islands in their own archipelago? But then, why all the power? And in any case, what about this fantastic switching panel, hundreds of square feet of it even though it was transistorized and subministurized and involving at least a dozen sophisticated technical refinements he hadn't the training quite to understand? AT&T could have handled every phone call in the United States with less switching than this-in the days when telephone systems spanned a nation instead of a fraction of a city. He pushed the papers together in a pile and sat back smoking a cigarette, trying to remember what he could of the theory behind submillimeter radi-

ation.

At half a million megacycles and up, the domain of quantum theory began to be invaded. Rotating gas molecules, constricted to the control of the con

no clear theory to point the way

— suggesting such strange ultimate practical applications as the
receiverless radio, for example.

Was that what he had here?

He gave up. It was a question that would burn at him until he found the answer, but just now he had work to do, and he'd better be doing it.

Skipping lunch entirely, he carefully checked the components lists, made a copy of what he would need, checked the original envelope and its contents

iginal envelope and its contents with the man at the main receiving desk for his safe, and caught the bus to Honolulu. At the Parts 'n Plenty store, Hsi read the list with a faint

frown that turned into a puzzled scowl. When he put it down he looked at Chandler for a few moments without speaking. "Well, Hsi? Can you get all this for me?" The parts man shruezed and nodded. "Koitska

said in three days."

Hsi looked startled, then resigned "That puts it right up to
me, doesn't it? All right. Wait a
moment"

He disappeared in the back of the store, where Chandler heard him talking on what was evidently an intercom system. He came back in a few minutes and slipped Chandler's list into a slit in the locked door. "Tough Tour Bert," he said. 'He'll be working all night, getting started — but I can take it easy till tomorrow. By then he'll know what we don't have, and I'll find some way to get it." He shrugged again, but his face was lined. Chandler wondered how one went about finding, for example, a thirty megwatt klystron tube; but it was Has's problem. He said: "All right. I'll see you Mon-

"All right, I'll see you Monday."
"Wait a minute, Chandler."

Hsi eyed him. "You don't have anything special to do, do you? Well, come have dinner with me. Maybe I can get to know you. Then maybe I can answer some of your questions, if you like."

THEY TOOK a bus out Kapidani Boulevard, then got out and walked a few blocks to a resturnant named Mother Cheek. Hat was well known then been supported to the waiter, ordered without looking at the menu and ast back. "You malihinis don't know much about food," he said, humorously patronizing. "I think work the supported to the said fish, and was a support to the said fish, and was supported to the said fish and was

The man was annoying. Chandler was moved to say, "Too bad, I was hoping for duck in orange sauce, perhaps some snow peas —"

Hsi shook his head. "There's

meat, all right, but not here. You'll only find it in the places where the execs sometimes go... Tell me something, Chandler. What's that scar on your fore-

head "

Chandler touched it, almost with surprise. Since the medics had treated it he had almost forgotten it was there. He began to explain, then paused, looking at Hsi, and changed his mind. "What's the score? You testing me, too? Want to see if Fil lie about it?"

His grinned. "Sorry. I guess that's what I was doing. I do know what an 'H' stands for; we've seen them before. Not many. The ones that do get this far usually don't last long. Unless, of course, they are working for somebody whom it wouldn't do to offend."

somebody whom it wouldn't do to offend," he explained. "So what you want to know, then, is whether I was really hoaxing or not. Does it make any difference?"

"Damn right it does, man! We're slaves, but we're not animals!" Chandler had gotten to him; the parts man looked startled, then sallow, as he ob-

served his own vehemence.
"Sorry, Hsi. It makes a difference to me, too. Well, I wasn't hoaxing. I was possessed, just like any other everyday rapist-murderer, only I couldn't prove it. And it dight book too good for

me, because the damn thing happened in a pharmaceuticals plant. That was supposed to be about the only place in town where you could be sure you wouldn't be possessed, or so everybody thought. Including me. Up to the time I went ane."

Hsi nodded. The waiter approached with their drinks. Hsi looked at him appraisingly, then did a curious thing. He gripped his left wrist with his right hand, quickly, then released it again. The waiter did not appear to notice. Exertly he served the

The waiter did not appear to notice. Expertly he served the drinks, folded small pink floral napkins, dumped and wiped their sahtray in one motion — and then, so quickly that Chandler was not quite sure he had seen it, caught Haïs wrist in the same fleeting gesture just before he turned and walked away. Without comment Hsi turned

back to Chandler. He said, "I believe you. Would you like to know why it happened? Because I think I can tell you. The execs have all the antibiotics they need now."

"You mean —" Chandler hes-

"That's right. They did leave some areas alone, as long as they weren't fully stocked on everything they might want for the foreseeable future. Wouldn't you?"

"I might," Chandler said cau-

tiously, "if I knew what I was --being an exec."

Hsi said, "Eat your dinner. I'll take a chance and tell you what I know." He swallowed his whiskey-on-the-rocks with a quick backward jerk of the head. "They're mostly Russians — you must know that much for yourself. The whole thing started in

Russia."

Chandler said, "Well, that's pretty obvious. But Russia was smashed up as much as anywhere else. The whole Russian government was killed — wasn't it?"

Hsi nodded. "They're not the

government. Not the exec. Communism doesn't mean any more to them than the Declaration of Independence does — which is nothing. It's very simple, Chandler: they're a project that got out of hand."

PACK four years ago, he said, in Russia, it started in the last days of the Second Stalinite Regime, before the Neo-Krushchevists took over power in the January Push.

The Western World had not known exactly what was going on, of course. The "mystery wrapped in a riddle surrounded by an enigma" had become queerer and even more opaque after Kruschchev's death and the revival of such fine old Soviet institutions as the Gay Pay Oo.

That was the development called the Freeze, when the Stalinites seized control in the name of the sacred Generalissimo of the Soviet Fatherland, a mighty-missile party, dedicated to bringing about the world revolution by force of sputnik. The neo-Krushchevists on the other hand, believed that honey caught more flies than vinegar; and, although there were few visible adherents to that philosophy during the purges of the Freeze, they were not all dead. Then, out of the Donbas Electrical Workshop, came sudden support for their point of view.

It was a weapon. It was more than a weapon, an irresistable tool - more than that, the way to end all disputes forever. It was a simple radio transmitter (Hsi said) - or so it seemed. but its frequencies were on an unusual band and its effects were remarkable. It controlled the minds of men. The "receiver" was the human brain. Through this little portable transmitter. surgically patch-wired to the brain of the person operating it. his entire personality was transmitted in a pattern of very short waves which could invade and modulate the personality of any

other human being in the world.

For that matter, of any animal,

as long as the creature had

enough "mind" to seize -

"What's the matter?" Hsi interrupted himself, staring at Chandler, Chandler had stopped eating, his hand frozen midway to his mouth. He shook his head. "Nothing, Go on," Hsi shrugged

and continued While the Western World was celebrating Christmas - the Christmas before the first outbreak of possession in the outside world - the man who invented the machine was secretly demonstrating it to another man. Both of them were now dead. The inventor had been a Pole, the other man a former Party leader who. four years before, had rescued the inventor's dying father from a Siberian work camp. The Party leader had reason to congratulate himself on that loaf cast on the water. There were only three working models of the transmitter - what ultimately was refined into the coronet Chandler had seen on the heads of Koitska and the girl - but that was enough

for the Tanuary push. The Stalinites were out. The neo-Krushchevists were in.

A whole factory in the Donbas was converted to manufacturing these little mental controllers as fast as they could be produced - and that was fast, for they were simple in design to begin with and were quickly refined to a few circuits. Even the surgical wiring to the brain became un-

necessary as induction coils tapped the encephalic rhythms. Only the great amplifying hookup was really complicated. Only one of those was necessary, for a sinele amplifier could serve as rebroadcaster - modulator for thousands of the headants

"Are you sure you're all right?" Hsi demanded.

Chandler put down his fork, lit a cigarette and beckoned to the waiter, "I'm all right. I just went enother drink "

He needed the drink, For now he knew what he was building

for Knitske. THE waiter brought two more

drinks and carried away the uneaten food, "We don't know exactly who did what after that," Hsi said, "but somehow or other it got out of hand. I think it was the technical crew of the factory that took over. I suppose it was an inevitable danger." He grinned savagely. "I can just imagine the Party workers in the factory," he said, "trying to figure out how to keep them in line - bribe them or terrify them? Give them dachas or send a quota to Siberia? Neither would work of course because there isn't any bribe you can give to a man who only has to stretch out his hand to take over the world, and you can't frighten a man who can make

you slit your own throat. Any-

way, the next thing that happened — the following Christmas was when they took over the world. It wasn't a Party movement at all any more. A lot of the workers were Czechs and Hungarians and Foles, and the first thing they wanted to was to

"So here they are! Before they let the whole world go bang they got out of range. They got themselves out of Russia on two Red Navy cruisers, about a thousand of them; then they systematically triggered off every ballistic missile they could find all of them, sooner or could find all of them, sooner or looking. As you as it was safe they moved in here. Best blace they moved in here. Best blace

in the world for them "There are only a thousand or so of them here on the Islands. and nobody outside the Islands even knows where they are. If they did, what good would it do them? They can kill anyone anywhere. They kill for fun, but sometimes they kill for a reason too. When one of them goes wan-dering for kicks he makes it a point to mess up all the transport and communications facilities be comes across - especially now, since they've stockpiled evrything they're likely to need for the next twenty years. We don't know what they're planning to do when the twenty years are

p- up. Maybe they don't care.
as Would you?"
Le Chandler drained his drink

and shook his head. "One question," he said. "Who's 'we'?"

Hsi carefully unwrapped a package of cigarettes, took one out and lit it. He looked at it as though he were not enjoying it; cigarettes had a way of tasting

stale these days. As they were,
"Just a minute," he said,
Tardily Chandler remembered
the quick green of the waiter's

fingers on Hsi's wrist, and that the waiter had been hovering, inconspicuously close, all through their meal. Hsi was waiting for the man to return.

In a moment the waiter was back looking directly at Chand.

ler. He looped his own wrist with his fingers and nodded. His said softly, "'We'" is the Society of Slaves. That's all of us — slaves — but only a few of us belong to the Society. We—"

There was a crash of glass.

The waiter had dropped their tray.

ler, Hsi looked suddenly changed. His left hand lay on the table before him, his right hand poised over it. Apparently he had been about to show Chandler again the sign he had made. But he could not do it. His

hand paused and fluttered, like a captured bird. Captured it was. Hsi was captured. Out of Hsi's mouth, with Hsi's voice, came the light, tonal rhythms of Rosalie Pan. "This is an unexpected pleasure, love! I never expected to see you here. Enjoying your meal?"

ıx

CHANDLER had his empty glass halfway to his lips, automatically, before he realized there was nothing in it to brace him. He said hoarsely, "Yes, thanks. Do you come hera of the of a language guide, wildly inappropriate to what had been going on a moment before. He was shaken.

"Oh, I love it," cooed Hsi, investigating the dishes before him.
"All finished, I see. Too bad.
Your friend doesn't feel like he ate much, either."

"I guess he wan't hungry."
Chandler manged.
"Well, I am." Hsi cocked his
head and smiled like a female
impersonator. "I know! Are you
love! I know you've esten, but—
well, I've been a good girl and I
guess I can eat a real meal, I
mean not with somebody else's
teth, and still keep the calories
in line. Suppose I meet you down
at the Beach? There's a place

can be there in half an hour."

Chandler's breathing was back
to normal. Why not? "I'll be delighted."

"Luigi the Wharf Rat, that's the name of it. They won't let you in, though, unless you tell them you're with me. It's special." Hai's eye closed in Rosalie Pan's wink. "Half an hour," Hsi said, and was again himself. He began to shake.

The waiter brought him straight whiskey and, pretense abandoned, stood by while Hsi drank it. After a moment he said, "Scares you. But — I guess we're all right. She couldn't have heard much. You'd better go, Chandler. I'll talk to you again some other time."

Chandler stood up. But he couldn't leave Hsi like that "Are you all right?"

Hsi almost managed control.

"Oh — I think so. Not the first time it's come close, you know. Sooner or later it'll come closer still and that will be the end, but — yes, I'm all right for now."

still and that will be the end, but

— yes, I'm all right for now."

Chandler tarried. "You were
saying something about the Society of Slaves."

"Damn it, go!" Hsi barked.
"She'll be waiting for you
Sorry, I didn't mean to shout.
But go." As Chandler turned, he
said more quietly, "Come around
to the store tomorrow. Maybe
we can finish our falls then."

I UIGI the Wherf Rat's was not actually on the beach but on the bab but of a body of water called the Ala Wai Canal. Across the water were the snowtopped hills. A maitre-de excorted Chandleir personally to a table on a halie "half-hour" was nearly two but then be heard her calling the maintenance of the water half-hour was nearly two but then be heard her calling from across the room, in the voice which had reached a thousand

which had reached a thousand second balconies, and he rose as the come near

she came near.

She said lightly, "Sorry. You ought to be flattered, though. It's a twenty-minute drive — and an hour and a half to put on my face, so you won't be ashamed to be seen with me. Well, it's good to be out in my own skin for a chance. Let's eat!"

The talk with Hsi had left a mark on Chandler that not even this girl's pretty face could obscure. It was a pretty face, though, and she was obviously exerting herself to make him enjoy himself. He could not help responding to her mood.

responding to her mood. She talked of her life on the stage, the excitement of a performance, the entertainers she had known. Her conversation was one long name-drop, but it was not pretense: the world of the famous was the world with the table lived in it was not a world that Chandler had ever visited, but he reconsider the names, but he reconsider the names.

Rosie had been married once to an English actor whose movite. Chandler had made a point of watching on television. It was interesting, in a way, to know that the man snored and lived principally on vitamin pills. But it was a view of the man that Chandler had not sought.

tele mostly from the execs, young ones or young-acting ones, like the girl. The coronets were all over. There had been a sign on the door:

KAPU, WALIHINI!

to mark it off limits to anyone not an exec or a collaborator. Still. Chandler thought, who on the island was not a collaborator? The only effective resistance a man could make would be to kill everyone within reach and then himself, thus depriving them of slaves - and that was, after all. only what the execs themselves had done in other places often enough. It would inconvenience them only slightly. The next few planeloads or shiploads of possessed warm bodies from the mainland would be permitted to live, instead of being required to dosh themselves to destruction. like the crew of the airplane that had carried Chandler. Thus the domestic stocks would be replen-

ished.

An approving feature of dining with Rosalie in the flesh, Chandler found, was that half a dozen times while they were talking he found himself taken, speaking words to Rosie that were not his own, usually in a language he did not understand. She took it as a matter of course. It was merely a friend, across the room or across the island, using Chandler as the casual convenience of a telephone, "Sorry," she apologized blithely after it happened for the third time, and then stopped "You don't like that love do Non5a

"Can you blame me?" He stopped himself from saying more; he was astonished even so at his tone She said it for him. "I know It

takes away your manhood, I supnose Please don't let it do that to you love. We're not so had Even-" She hesitated, and did not go on, "You know," she said. "I came here the same way you did. Kidnaped off the stage of the Winter Garden, Of course, the difference was the one who kid-

naped me was an old friend Though I didn't know it at the time and it scared me half to death. Chandler must have looked startled. She nodded. "You've been thinking of us as another

race, haven't you? Like the Neanderthals or - well, worse than that, maybe." She smiled. "We're not. About half of us came from Russia in the first place, but the others are from all over. You'd be astonished, really." She mentioned several names, world-famous scientists, musicians, writers, "Of course, not everybody can qualify for the club, love, Wouldn't be exclusive otherwise. The chief rule is lovalty. I'm loval." she added gently after a moment. "and don't you forget it. Have to be. Whoever becomes an exec has to be with us, all the way. There are tests. It has to be that way -not only for our protection. For the world's."

Chandler was genuinely startled at that. Rosie nodded seriously, "If one exec should give away something he's not supposed to it would upset the whole applecart. There are only a thousand of us, and I guess probably two billion of you, or nearly. The result would be complete destruction."

Of the Executive Committee. Chandler thought she meant at first, but then be thought again. No. Of the world. For the thoussand execs, outnumbered though they were two million to one. could not fail to triumph. The contest would not be in doubt. If the whole thousand execs at once began systematically to kill and destroy, instead of merely playing at it as the spirit moved them, they could all but end the human race overnight. A man could be made to slash his throat in a quarter of a minute. An exec, killing, killing without you.

killing, killing, killing without pause, could destroy his own two million enemies in an eight-hour day.

And there were surer, faster ways. Chandler did not have to imagine them, he had seen them. The massacre of the Orphalese, the victims at the Monument they were only crumbs of destruction. What had happened to New York City showed what massproduction methods could do. No doubt there were bombs left, even if only chemical ones. Shoot, stab, crash blow up; swallow poison. leap from window, slit throat, Every man a murderer, at the touch of a mind from Hawaii: and if no one else was near to murder, surely each man could find a victim in himself. In one ravaging day mankind would cease to exist as a major force. In a week the only survivors would be those in such faroff and hopelessly impotent places that they were not worth the trouble of tracking down.

Chandler paused and tried to find an answer. Rosie was not either belligerent or mocking. She was only sympathetically trying to reach his point

of view. He shook his head silent-

"Not meaning 'no' — meaning 'no comment'? Well, I don't blame you, love. But do you see that we're not altogether a bad thing? It's bad that there should be so much violence. In a way, Hassithere always been violence? And what were the alternatives? Until we came along the world was get-

ting ready to kill itself anyway." "There's a difference," Chandler mumbled. He was thinking of his wife. He and Margot had loved each other as married couples do - without any very great, searing compulsion; but with affection, with habit and with sporadic passion. Chandles had not given much thought to the whole, though he was aware of the parts, during the last years of his marriage. It was only after Margot's murder that he had come to know that the sum of those parts was a quite irreplace-

But Rosie was shaking her head "The difference is all on our side. Suppose Koitslan's bos had never discovered the cornets. At any moment one country might have got nervous and touched off the whole thing not carefully, the way we did it, with most of the really dirty missiles fused safe and others landing where they were supposed to yo. I mean, touched off a war.

able love

The end, love. The bloody finis. The ones that were killed at once would have been the lucky ones. No, love," she said, in dead earnest, "we aren't the worst things that ever happened to the world. Once the — well, the bad part — is over, people will understand what we really are."

"And what's that, exactly?" She hesitated, smiled and said modestly, "We're gods."

modestly, "We're gods."

It took Chandler's breath
away — not because it was untrue, but because it had never
occurred to him that gods were

aware of their deity.
"We're gods, love, with the
privilege of electing mortals to
the club. Don't judge us by anything that has gone before. Don't
judge us by anything. We are a
New Thins. We don't have to

conform to precedent because we upset all precedents. From now on, to the end of time, the rules will grow from us."

She patted her lips briskly with a napkin and said, "Would

with a napkin and said, "Would you like to see something? Let's take a little walk."

She took him by the hand and

led him across the room, out to a sundeck on the other side of the restaurant. They were looking down on what had once been a garden. There were people in it; Chandler was conscious of sounds coming from them, and he was able to see that there were

nis dozens of them, perhaps a hundred, and that they all seemed to be wearing suntans like his own. "From Tripler?" he guessed.

"No, love, They pick out those clothes themselves. Stand there a minute."

The girl in the coronet walked

and the rail of the sundeck, where pink and amber spotlights were playing on nothing. As she came into the colored lights there was a sigh from the people in the garden. A man walked forward with an armload of leis and deposited them on the ground below the rail.

They were adoring her.
Rosalie stood gravely for a
moment, then nodded and returned to Chandler.
"They began doing that about
a year aso," she whistogred to

him, as a murmur of disappointment came up from the crowd. "Their own idea. We didn't know what they wanted at first, but they weren't doing any harm. You see, love," she said softly, "we can make them do anything we like. But we don't make them do ther."

HOURS later, Chandler was not sure just how, they were in a light plane flying high over the Pacific, clear out of sight of land. The moon was gold above them, the ocean black beneath. girl circled the plane, slipping lower toward the water, silent and perplexed. But he was not afraid. He was almost content. Rosie was good company - gay. cheerful-and she had treasures to share. It had been an impulse of hers, a long drive in her sports car and a quick, comfortable flight over the ocean to can the evening. It had been a pleasant impulse. He reflected gravely that he could understand now how generations of country maidens had been dazzled and despoiled. A touch of Juxury was a

great seducer.

The coronet on the girl's body could catch his body at any moment. She had only to think herself into his mind, and her will, lashed to a relay station like the one he was building for Koitskeep into him and make him a puppet. If she chose, he would open that door beside him and step out into a thousand feet of air and a time at the count of the country to the co

But he did not think she would do it. He did not think anyone would, really, though with his own eyes he had seen some anyones do things as had as that and sickeningly worse. There was no corrupt whim of the most diseased mind in history that some torpid exec had not visited on a helpless man, woman or child in the past veras. Even as they flew here, Chandler knew, the gross bodies that lay in luxury in the island's villas were surging restlessly around the world; and death and horror remained where they had passed. It was a paradox too great to be reconciled, this girl and this vileness. He could not forget it, but he could not feel it in his glands. She was for this could not the could not the could not the could not be the could not the the could not the could not the could not the the could not the could not the could not the could not the the could not the could not the could not the could not the the could not the c

The dark bulk of the island showed ahead and they were sinking toward a landing.

The girl landed skillfully on a runway that sprang into light as she approached — electronic wisardry, or the coronet and some tethered serf at a switch? It didn't matter. Nothing mattered very greatly at that moment to Chandler.

"Thank you, love," she said, laughing. "I liked that. It's all very well to use someone else's body for this sort of thing, but every now and then I want to keep my own in practice."

She linked arms with him as they left the plane. "When I was first given the coronet here," she reminisced, amusement in her voice, "I got the habit real bad, rereally, six months in bed! And by myself at that. Oh, I was all over the world, and skin-diving on the Barrier Reef and skine in

Norway and - well," she said, squeezing his arm, "never mind what all. And then one day I got on the scales, just out of habit. Do you know what I weighed?" She closed her eyes in mock horror, but they were smiling when she opened them again, "I won't do that again, love. Of course, a lot of us do let ourselves go. Even Koitska, Especially Koitska, And some of the women - But just

between us, the ones who do really didn't have much to keep in shape in the first place." She led the way into a villa

that smelled of jasmine and gardenias, snapped her fingers and subdued lights came on. "Like it? Oh, we've nothing but the best. What would you like to drink?" She fixed them both tall, cold

glasses and vetoed Chandler's choice of a sprawling wicker chair to sit on "Over here, love." She patted the couch beside her. She drew up her legs, leaning against him, very soft, warm and fragrant, and said dreamily, "Let me see. What's nice? What do you like in music, love?" "Oh . . . anything."

"No. no! You're supposed to say. Why, the original-cast album from Hi There,' Or anything else I starred in." She shook her head reprovingly, and the points of her coronet caught golden reflections from the lights, "But since you're

obviously a man of low taste I'll have to do the whole bit myself." She touched switches at a remotecontrol set by her end of the couch, and in a moment dreamy strings began to come from triaural speakers hidden around the room. It was not Hi There. "That's better," she said drowsily, and in a moment "Wasn't it nice in the plane?"

"It was fine," Chandler said. Gently - but firmly - he sat up and reached automatically in-

to his pocket. The girl sighed and straightened, "Cigarette? They're on the

table beside you. Hope you like the brand. They only keep one big factory going, not to count those terrible Russian things that're all air and no smoke." She touched his forehead with cool fingers, "You never told me about that, love." It was like an electric shock

- the touch of her fingers and the touch of reality at once, Chandler said stiffly, "My brand, But I thought you were there at the trial" "Oh, only now and then. I

missed all the naughty parts though, to tell the truth, that's why I was hanging around, I do like to hear a little naughtiness now and then . . . but all I heard was that stupid lawyer and that stupid judge. Made me mad." She giggled. "Lucky for you. I

CHANDLER sat up and took a

long null at his drink Curiously, it seemed to sober him. He said: "It's nothing, I happened to rape and kill a young girl. Happens every day. Of course, it was one of your friends that was doing it for me, but I didn't miss any of what was going on, I can give you a blow-by-blow description if you like. The people in the town where I lived, at that time, thought I was doing it on my own, though, and they didn't approve. Hoaxing - you know? They thought I was so perverse and cruel that I would do that sort of thing under my own power, instead of with some exec - or, as they would have put it, being ignorant, some imp, or devil or demon - pulling the strings '

He was shaking. He waited for what she had to say; but she only whispered, "I'm sorry, love," and looked so contrite and honest that, as rapidly as it had come upon him his anger passed.

He opened his mouth to say something to her. He didn't get it said. She was sitting there, looking at him, alone and soft and inviting. He kissed her; and as she returned the kiss, he kissed her again, and again.

But leav then an hour later he

on him, his anger passed. with a lover, violent in love, and the opened his mouth to say was unable to tell the other that which were a third party had invaded their and the control of t

raging, frustrated, miserable. He slammed it through the unfamiliar gears as he sped back to the city.

She had left him. They had kissed with increasing passion, his hands playing about her, he body surging toward him, and then, just then, she whispered, "No. love." He held her tiehter

was in her Porsche, cold sober,

and without another word she opened her eyes and looked at him.

He knew what mind it was that caught him then. It was her mind. Stiffly, like wood, he released her, stood up, walked to the door and locked it behind

him.

The lights in the villa weart out. He stood there, boiling, look-ing into the shadows through the great, wide, empty window. He couds each ler lying there on the couds, and as he watched he saw her body toss and stir; and as surely as he had ever known any-thing before he kniw that somewhere in the world some woman—or some mand — lay locked with a lover, violent in love, and was unable to tell the other that

a third party had invaded their bed.

Chandler did not know it until he saw something glistening on his wrist, but he was weeping on the wild ride beck to Honolulu in the car. Her car, Would them be trouble for his taking it? God, let there be trouble! He was in a mood for trouble. He was sick and wild with revulsion.

casual stimulant, an aphrodisiac touch, was that she thought what she did was right. Chandler thought of the worshipping dozens under the sundeck of the exec restaurant, and Rosale's gracious benediction as they made her their floral offering.

made her their floral offerings. Blind, pathetic fools! Not only the deluded men and women in the garden were wor-

women in the garden were worshippers trapped in a vile religion, he thought. It was worse. The gods and goddesses worshipped at their own divinity as well!

х

THREE days later Koitska's voice, coming from Chandler's lips, summoned him out to the TWA shack again.

Wise now in the ways of this world, Chandler commandered a police car and was hurried out to the South Gate, where the guards allowed him a car of his own. The door of the building was unlocked and Chandler went

own. The door of the building was unlocked and Chandler went right up.

He was astonished. The fat man was actually sitting up. He was fully dressed — more or

short-sleeve shirt, with rope sandals. He said, "You fly a gilikopter? No? No difference. Help me." An arm like a mountain went over Chandler's shoulders. The man must have weighed three hundred pounds. Slowly, wheezing, he limped toward the back of the room and touched a button.

A door opened.

Chandler had not known before that there was an elevator in the building. That was one of the things the exec did not consider important for his slaves to know. It lowered them with great grace and delicacy to the first floor, where a large dold Cadillac, macent but ment and the standard of the constitution o

Chandler followed Koitska's directions and drove to an sir-field where a small, Plexighanosed helicopter waited. More by the force of Chandler pushing his own fat thighs, Koitska puffed up the little staircase into the cabin. Originally the copter had been fitted for four passengers. Now there was the pilot's seet and a seat beside it, and in the books of the country of the coun

somewhere else, just then,

In a moment his eyes opened



again. He looked at Chandles with no interest at all, and turned his face to the wall.

After a moment he wheezed "Sit down. At de controls." He breathed noisily for a while. Then, "It von't pay you to be in-

terested in Rosalie," he said Chandler was startled. He craned around in the seat but saw only Koitska's back, "I'm not! Or anyway -" But he had no place to go in that sentence. and in any case Koitska no long-

er seemed interested

After a moment Koitska stirred, settled himself more comfortably, and Chandler felt himself taken. He turned to face the solit wheel and the unfamiliar pedals and watched himself work the controls. It was an admirable performance. Whoever Chandler was just then - he could not guess - he was a first-class heliconter pilot.

THEY crossed a wide body of ocean and approached another island; from one quick glance at a navigation map that his eyes had taken, Chandler guessed it to be Hilo. He landed the craft expertly on the margin of a small airstrip, where two DC-3s were already parked and being unloaded, and felt himself free avain.

Two husky young men, appar-ently native Hawaiians by their

size, rolled up a ramp and assisted Knitska down it and into a building. Chandler was left to his own devices. The building was rundown but sound Around it stalky grass clumped, long uncut, and a few mauve and scarlet blossoms almost hidden, showed where someone had once tended beds of bougainvillea and poinsettias. He could not guess what the building had been doing there, looking like a small officefactory combination out in the remote wilds, until he caught sight of a sign the winds had blown against a wall: Dole, Apparently this had been beadquarters for one of the plantations, Now it was stripped almost clean inside, a welter of desks and rusted machines piled heedlessly where there once had been a parking lot. New equipment was being loaded into it from the cargo planes Chandler recognized some of it as from the list he had given the parts man, Hsi. There also seemed to be a gasoline-driven generator - a large

one - but what the other things were he could not guess. Besides Koitska, there were at least five coronet-wearing execs visible around the place. Chandler was not surprised. It would have to be something big to winkle these torpid slugs out of their shells, but he knew what it was, and that it was big enough to them indeed; in fact, it was their lives. He deduced that Koiska's plans for his future comfort required a standby transmitter to service the coronets, in case something went wrong. And clearly it was this that they were to put together here. For ten hours, while the afternoon became dark night, they

worked at a furious pace. When

the sun set one of the execs gestured and the generator was started, rocking on its rubbertirad wheels as its rotors soun and fumes chugged out, and they worked on by strings of incandescent lights. It was pick-andshovel work for Chandler, no engineering, just unloading and roughly grouping the equipment where it was ready to be assembled. The execs did not take part in the work. Nor were they idle. They busied themselves in one room of the building with some small device - Chandler could not see what - and when he looked again it was gone. He did not see them take it away and did not know where it was taken Toward midnight he suddenly realized that it was likely some essential part which they would not permit anyone but themselves to handle, and that, no doubt, was why they had come in

person instead of working

Just before they left Koitska

and two or three of the other execut quizzed him briefly. He was too tired to think beyond the questions, but the yesemed to be trying to find out if he was able to do the simpler parts of the construction without supervision, and they seemed satisfact vision, and they seemed satisfact beliefly the seemed as the property of the construction without supervision, and they seemed satisfact beliefly the same and legs, but the was half saleep as he did it, and he never quite remembers.

THE next morning he went back to Parts 'n Plenty with an additional list, covering replacement of some parts that had been damaged. Hai glanced at it quickly and nodded. "All this stuff I have. You can pick the this afternoon if you like."

Chandler offered him a cigarette out of a stale pack. "About

back to his room at Tripler.

Hsi began to perspire, but he said, casually enough, "Interested in baseball?" "Baseball?" Hsi said, as though there had

the other night -"

been nothing incongruous about the question, "There'll be a Little League game this afternoon. Back of the school on Punahou and Wilder. I thought I might stop by, then we can come back and pick up the rest of your gear. Two c'clock. Hope I'll see you."

through proxies.

Chandler walked away thoughtfully. He had no real intention of going there, but something in Hsi's attitude suggested more

than a ball game; after a quick and poor lunch he decided to go. The field was a dirty playground, scuffed out of what had probably once been an attractive campus. The players were tenyear-olds of the mixture of hair colors and complexions typical of the islands. Chandler was puzzled. Surely even the wildest baseball rooter wouldn't go far out of his way for this, and yet there was an audience of at least fifty adults watching the game, And none seemed to be related to the ballplayers. The Little Leaguers played grave, careful hall, and the audience watched them without a word of parental

encouragement or joy.

Hsi approached him from the
shadow of the school building.

"Glad you could make it. Chand-

her. No, no questions. Just watch. In the fifth hinning, with the score aggregating around thirty, there was an interruption. A little, red-headed man glanced at his watch, licked his lips, took a deep breath and walked out onto the diamond. He glanced at the crowd, while the kids supended play without surprise. Then the unpire and stepped off the field. The ballolavier resumed the

atgame, but now the whole attenon tion of the audience was on the in red-headed man.

Suspicion crossed Chandler's mind. In a moment it was confirmed, as the red-headed man raised his hands waist high and clasped his right hand around his left wrist — only for a moment, but that was enough.

The ball game was a cover. Chandler was present at a meeting of what Hsi had called The Society of Slaves, the underground that dared to pit itself against the execs.

Hsi cleared his throat and said,
"This is the one. I vouch for him."
And that was startling too,
Chandler thought, because all
these wrist-circled men and women were looking at him.

66 & LL right." said the red-

A headed man nervously,

"let's get started then. First thing, anybody got any weapons? Sure? Take a look — we don't want any slipups. Turn out your pockets."

There was a flurry and a worn-

There was a nurry and a woman near Chandler beld up a key ring with a tiny knife on it. "Penknife? Hell, yes; get rid of it. Throw it in the outfield. You can pick it up after the meeting." A hundred eyes watched the pearly object fip. "We ought to be all right here," said the red-headed man. "The kids have been playing every day this week and nobody looked in. But watch your neighbor. See anything suspicious, don't wait. Don't take a chance. Holler Kill the umpire! or anything you like, but holler. Good and loud." He paused, breathing hard. "All right, Hsi. Introduce him."

The parts man took Chandler firmly by the shoulder "This fellow has something for us," he said. "He's working for the exec
Koitska, building what can't be
anything else but a duplicate of
the machine that they use to control us. "He..."

"Wait a minute!" A bearded man came forward and peered furiously into Chandler's face. "Look at his head! Don't you see he's branded?"
Chandler truched his sorn as

the man with the beard hissed,
"Damned hoazer! This is the lowest species of life on the face of
the earth — someone who pretended to be possessed in order
to do some damned dirty act.
What was it, hoazer? Murder?
Burning babies alive?"

Hsi economically let go of Chandler's shoulder, half turned the bearded man with one hand and swung with the other. "Shut up, Linton. Wait till you hear

up, Linton. Wait till you hear what he's got for us."

The bearded man, sprawling and groggy, slowly rose as Hsi explained tersely what he had guessed of Chandler's work — as much as Chandler himself knew, it seemed. "Maybe this is only a duplicate. Maybe it worn't be used. But maybe it will — and Chandler's the man who can sabotage it! How would you like that The exces switching over to this equipment while the other one is down for maintenance — and their beaders! don't work!"

There was a terrible silence, except for the sounds of the children playing ball. Two runs had just scored. Chandler recognized the silence. It was hope.

Linton broke it, his blue eyes gleaming above the beard. "No! Better than that Why wait? We can use this fellow's machine. Set it up, get us some headsets — and we can control the execs themselves!"

THE silence was even longer; then there was a babble of discussion, but Chandler did not take part in it. He was thinking. It was a tremendous thought. Suppose a man like himself

Suppose a man ince numeer were actually able to do what they wanted of him. Never mind the practical difficulties — learning how it worked, getting a head-set, bypassing the traps Koitska would surely have set to prevent just that. Never mind the penal-ties for failure. Suppose he could make it work, and find fifty head-set, and fit them to the fifty menses, and fit them to the fifty menses, and fit them to the fifty menses.

and women here in this clandestine meeting of the Society of

Would there, after all, be any change worth mentioning in the state of the world? Or was Lord Acton, always

and everywhere, right? Power corrupts Absolute power corrupts absolutely. The power locked in the coronets of the exace was more than flesh and blood could stand, he could almost sense the rot in those near him at the mere thought.

But Hsi was throwing cold

water on the idea. "Sorry, but I know that much: One exec can't control another. The headpieces insulate against control, Well, He glanced at his watch. "We agreed on twenty minutes maximum for this meeting." he reminded the red-headed man, who notified.

nodded. "You're right" He glanced around the group. "Ill make the rest of it flast. Newer You all know they get some more of us the work of the group of the grou

been lying out there for a week with a broken back, ever since they caught him trying to blow up the guard pits at East Gate. They had plenty of chance to pump him if they could. They can't, Next thing. No more individual attacks on one exec. Not unless it's a matter of life and death, and even then you're wasting your time unless you've got a gun. They can grab your mind faster than you can cut a throat. Third thing: Don't get the idea there are good execs and bad execs. Once they put that thing on their heads they're all the same, Fourth thing, You can't make deals. They aren't that worried. So if anybody's thinking of selling out - I'm not saving

tically every one of us, and he's

anyone is — forget it." He looked around. "Anything else?" "What about germ warfare in the water supply?" somebody ventured.

"Still looking into it. No report yet. All right, that's enough for now. Meeting's adjourned. Watch the ball game for a while, then drift away. One at a time." Hsi was the first to go, then a

Hsi was the first to go, then a couple of women together, then a sprinkling of ether men. Chandler was in no particular hurry, although it seemed time to leave anyway, because the ball game appeared to be over. A ten-year-old with freckles on his face was

at the plate, but he was leaning on his bat, staring at Chandler with wide, serious eyes.

Chandler felt a sudden chill.

He turned, began to walk
away — and felt himself seized.

HE WALKED slowly into the schoolhouse, unable to look around. Behind him he heard a confused sob, tears and a child's voice trying to blubber through:

"Something funny happened." If the child had been an adult it might have been warning enough. But the child had never experienced possession before, was not sure enough. was clear into the schoolhouse before the remaining members of the Society of Slaves awoke to their danger. He heard a quick cry of They got him! Then Chandler's less stopped walking and he addressed himself savarely. A few yards away a stout Chinese lady was mopping the tiles; she looked up at him, startled, but no more startled than Chandler was himself, "You idiot!" Chandler blazed, "Why do you have to get mixed up in this? Don't you know it's wrong, love? Stay here!" Chand-

wrong, love? Stay here!" Chandler commanded himself. "Don't you dare leave this building!" And he was free again, but there was a sudden burst of

screams from outside.
Bewildered, Chandler stood

for a moment, as little able to move as though the girl still had him under control. Then he leaped through a classroom to a window, staring, Outside in the playground there was wild confusion, Half the spectators were on the ground, trying to rise, As he watched, a teen-age boy hurled himself at an elderly lady, the two of them falling. Another man flung himself to the ground. A woman swung her pocketbook into the face of the man next to her. One of the fallen ones rose. only to trip himself again. It was a mad spectacle, but Chandler understood it: What he was watching was a single member of the exec trying to keep a group

so, the crowd was beginning to scatter. Without thought Chandler started to leap out to help them; but the possessor had anticipated that. He was caught at the door. He whirled and ran toward the woman with the mop; as he was released, the woman flung herself uoon him. Rookine him down.

of twenty ordinary, unarmed hu-

man beings in line. The exec was

leaning from mind to mind: even

By the time he was able to get up again it was far too late to help . . . if there ever had been a time when he could have been of any real help.

He heard shots. Two police-

He heard shots. Two policeman had come running into the playground, with guns drawn. The exce who had looked at him out of the boy's eyes, who had penetrated this nest of enemies and extricated Chandler from it, had taken first things first. Help had been summoned, Quick as the coronets worked, it was no time at all until the nearest persons with weapons were content of the control of the

Two minutes later there no longer was resistance.

Obviously more exces had come to help, attracted by commotion perhaps, or summoned at some stolen moment after moment after the meeting had first been invaded. There were only five survivors on the field. Each was clearly controlled. They rose and stolen the sound patiently while the two police shot them, shot them, passed to reload and shot again. The last to die was the bearded man.

Linton, and as he fell his eyes brushed Chandler's. Chandler leaned against a wall. It had been a terrible sight. The nearness of his own death had been almost the least of it.

had been almost the least of it. He had no doubt of the identity of the exec who had saved him and destroyed the others. Though he had heard the voice only as it came from his own mouth, he could not miss it. It

wn. ed man, sprawled across the foul at line behind third base, and rewho membered what he had said. en- There weren't any good execs or filer bad execs. There were only execs

XI

WHATEVER Chandler's life might be worth, he knew he

might be worth, he knew he had given it away and the girl had given it back to him.

He did not see her for several

days, but the morning after the massacre he woke to find a note beside his bed table. No one had been in the room. It was his own sleeping hand that had written it, though the girl's mind had moved his fingers:

If you get mixed up in anything like that again I won't be able to help you. So don't! Those people are just using you, you know. Don't throw away your chances. Do you like surfboarding?

But by then there was no time

for surfboarding, or for anything else but work. The construction job on Hilo had begun, and it was a nightmare. He was flown to the island with the last load of parts. No exces were present in the flesh, but in the first day Chandler lost count of how many different minds possessed his own. He began to be able to recwalked, by tags of German as he spoke, by a stutter, a distinctive gesture of annovance, an expletive. As he was a trained engineer he was left to labor by himself for hours on end. It was worse for the others. There seemed to be a dozen execs hovering invisible around all the time; no sooner was a worker released by one than he was seized by another. The work progressed rapidly, but at the cost of utter exhaution. By the end of the fourth day Chandler had eaten only two meals and could not remember when he had slept last. He found himself staggering when free, and furious with the fatimus.clumsiness of his own body when possessed At sundown on the fourth day he found himself free for a moment and, incredibly, without work of his own to do just then until someone else completed a ioh of natchwiring. He stumbled out into the open air and had time only to gaze around for a moment before his eyes began to close. This must once have been a lovely island. Even unkempt as it was the trees were tall and beautiful. Beyond them a wisp of smoke was pale against the dark-blue evening sky; the breeze was scented . . . He woke and found he was already back in the building, reaching for his soldering gun.

ognize them by a limp as he

There came a point at which even the will of the exec was unable to drive the flogged bodies farther, and then they were permitted to sleep for a few hours. At daybreak they were awake again. The sleep was not enough. The bodies were slow and inaccurate. Two of the Hawaiians, straining a hundred-pound component into place, staggered, alipped—and tropped it.

slipped — and dropped it.

Appalled, Chandler waited for
them to kill themselves.

But it respend that the every

were tiring too. One of the Hawalians said irritably, with an accent Chandler did not recognize: "That's pau. All right, you morons, you've won yourselves a vacation; we'll have to fly you in replacements. Take the day off." And incredibly all eleven of the haggard wrecks stumbling around the building were free at

The first thought of every man was to eat, to relieve himself, to remove a shoe and ease a blistered foot — to do any of the things they had not been permitted to do. The second thought was sleep.

Chandler dropped off at once, but he was overtired; he slept fitfully, and after an hour or two of turning on the hard ground sat up, blinking red-eyed around. He had been slow. The cushioned seats in the sircreft and care were already taken. He stood up, stretched, scratched himself and wondered what to do next, and he remembered the thread of smoke he had seen — when? three nights ago? — against the evening sky.

In all those hours he had not had time to think one obvious thought: There should have been no smoke there! The island was

no smoke there! The island was supposed to be deserted. He stood up, looked around to get his bearings, and started off in the direction be remembered.

IT WAS good to own his body again, in poor condition as it was. It was delicious to be allowed to think consecutive thoughts.

The chemistry of the human

animal is such that it heals whatever thrusts it may receive from the outside world. Short of death, its only incapacitating wound comes from itself; from the outside it can survive astonishing, blows, rise again and flourish. Chandler was not flourishing, but he had begun to rise.

he had begun to rise.

Time had been so compressed
and blurred in the days since the
slaughter at the Punahou School
that he had not had time to
grieve over the deaths of his
briefly-met friends, or even to
think of their quixotic plans
against the execs. Now he began
to wonder.

He understood with what thrill
of hope he had been received —
1 a man like themselves, not an
f exec, whose touch was at the
very center of the exec power.
But how firm was that touch?
Was there really anything he
t could do?

It seemed not. He berely understood the mechanics of what he was doing, far less the theory behind it. Conceivably knowing, where this installation was he could somehow get back to it when it was completed. In theory it might be that there was a way to dispense with the headsets and exert power from the bis board.

A Cro-Magnard at the controls of a nuclear-laden jet bomber could destroy a city. Nothing stopped him. Nothing but his own invincible ignorance. Chandler was that Cro-Magnard; certainly power was here to grasp, but had no way of knowing how to

itself.

pick it up.

Still — where there was life
there was hope. He decided he
was wasting time that would rime that the
was wasting into that would not
come again. He had been wandering along a road that led not
a small town, quite deserted, but
this was no time for wandered,
His place was back at the installation, studying, scheming, trug,
to understand all he could. He
beean to turn, and stoned.

"Great God," he said softly,

looking at what he had just seen. The town was deserted of life, but not of death.

THERE were bodies everywhere.

They were long dead, perhaps

years. They seemed natural and right as they lay there. It was not surprising they had escaped his notice at first. Little was left but bones and an occasional desiccated leathery ray that might have been a face. The clothing was faded and rotted away; but enough was left of the bodies and the clothes to make it clear that none of these people had died natural deaths. A rusted blade in a chest care showed where a knife had pierced a heart: a small skull near his feet (with a scrap of faded blue rompers near it) was shattered. On a flagstone terrace a family group

where a knife had pierced a heart; a small skull near his feet (with a scrap of faded blue rompers near it) was shattered. On a flagstone terrace a family group of bones lay radiating outward, like a rosette. Something had exploided there and control of the product there are control of the product there are control of the a woman's face, grained like oak and eyeless, visible between the fender of a truck and a crushedin wall.

in wall.

Like exhumed Pompeii, the tragedy was so ancient that it aroused only wonder. The whole town had been blotted out.

The exces did not take chances; apparently they had credited the whole island.

probably had sterilized all of them except Oahu itself, to make certain that their isolation was complete, except for the captive stock allowed to breed and serve them in and around Honolulu.

Chandler prowled the town for a quarter of an hour, but one street was like another. The bodies did not seem to have been disturbed even by animals, but perhaps there were none big enough to show traces of such

work. Something moved in a door-

Chandler thought at once of the smoke he had seen, but no one answered his call and, though he searched, he could neither see nor hear anything alive.

The search was a waste of

time. It also wasted his best chance to study the thing he was building. As he returned to the cinder-block structure at the end of the airstrip he heard motors and looked up to see a plane circling in for a landing. He knew that he had only a

few minutes. He spent those minsa sthriftly as he could, but long before he could even grasp the circuitry of the parts he had not himself worked on he felt a touch at his mind. The plane was rolling to a stop. He and all of them hurried over to begin unloading it.

The plane was stopped with

GALAXY

building, heading directly into it — convenient for unloading, but a foolish nuisance when it came time to turn it and take off again, Chandler's mind thought while his body lugged cartons out of the plane.

But he knew the answer to that. Takeoff would be no problem, any more than it would for the other small transports at the

the other small transports at the far end of the strip. These planes were not going to

return, ever.

THE work went on, and then it was deno, or all but, and Chandler knew no more about it than when it was begun. The last little bit was a careful check of line voltages and a balancing of bisess. Chandler could helfo except which was considered to the control of the country of

Spent, the other men flopped to the ground, waiting.
They were far gone. All of them, Chandler as much as the others. But one of them rolled over, grinned tightly at Chandler and said, "It's been fun, My

one wingtip almost touching the people ought to know each building heading directly into it other's names in cases like this.

— convenient for unloading, but Imagine sharing a grave with a foolish nuisance when it came

"Grave?"
Bradley nodded. "Like Pharaoh's slaves. The pyramid is just about finished, friend. You don't know what I'm talking about?"
He sat up, plucked a blade of stemmy grass and put it between

his teeth. "I guess you haven't seen the corpses in the woods." Chandler said, "I found a town half a mile or so over there, nothing in it but skeletons."

"No, heavens, nothing that ancient. These are nice fresh corpses, out behind the junkhesp at here. Well, not fresh. They're a couple of weeks old. I thought it was neat of the exect to dispose of the used-up labor out of sight of the rest of us. So much best for morale . . . until Juan Simos and I went back looking for a plain, simple electrical extension cord and found them."

With icy calm Chandler realized that the man was taling sense. Used-up labor: the men who had unloaded the first planes, no doubt — worked until they dropped, then efficiently disposed of, as they were so cheap a commodity that they were not worth the trouble of hauling back. to Honolulu for salvage." I see," he said, "Besides, dead men tell no tales." "And spread no disease. Probably that's why they did their killing back in the tall trees. Always the chance some exec might have to come down here to inspect in person. Rotting corpses just aren't sanitary." Bradley grinned again. "I used to be a doctor at Molokai."

"Lep ---" began Chandler, but the doctor shook his head. "No, no, never say 'leprosy.'

It's 'Hansen's disease,' Whatever it is the execs were sure scared of it. They wiped out every patient we had, except a couple who got away by swimming; then for good measure they wiped out most of the medical staff too, except for a couple like me who were off-island and had the sense to keep quiet about where they'd worked, I used," he said, rolling over his back and putting his hands behind his head, "in the old days to work on pest-control for the Public Health Service. We sure knocked off a lot of rats and fleas, I never thought I'd be one of them." He was silent.

one of them." He was silent.

Chandler admired his courage very much. The man had fallen asleen.

Chandler looked at the others.
"You going to let them kill us
without a struggle?" he demanded.
The remaining Hawaiian was
the only one to answer. He said,
"You just don't know how much

b- pilikia you're in. It isn't what we ir let them do."

"We'll see," Chandler promised grimly. "They're only human. I haven't given up yet."

BUT in the end be could not save himself; it was the girl who saved him. That night Chandler tossed in troubled seep, and woke to find himself standing, walking toward the Tri-Pacer. The sun was just beginning to pink the sky and no else was moving "Sorry, love," the standard of the standard was moving "Sorry, love," the standard was moving the sky the standard was moving the standard was moving the standard was save, but I don't know how.

Shawe, I mean "He siggled." Any-

way, you'll find everything you

He climbed into the plane.

need at my house."

"Ever fly before?" he asked himself. "Well, you'll love it. Here we go. Close the door . . . snap the belt . . . furn the switch." He admired the practiced ease with which his body started the moor, raced if with a critical eye on the instruments, turned the plane and lifted it off, up, into the rising sun.

"Oh, dear. You do need a bath," he told himself, wrinkling his nose humorously. "No harm. I've the nicest tub — pink, deep — and nine kinds of bath salts. But I wish you weren't so tired, love, because it's a long flight and you've wearing me out." He was silent as he bent to the correct compass heading and cranked a handle over his head to adjust the trim. "Koitska's going to be so huhu," he said, smiling. "Never fear, love, I can calm him down. But it's easier to do with you in one piece, you know, the other way's too late."

He was silent for a loop time.

and then his voice began to sing. They were songs from Rosalie's own musical comedies. Even with so poor an instrument as Chandler's voice to work with, she sang well enough to keep both of them entertained while his body brought the plane in for a landing; and so Chandler went to live in the villa that belonged to Rosalie Pan.

XII

44 OVE," she said, "there are worse things in the world than keeping me amused when I'm not busy. We'll go to the beach again one day soon, I promise." And she was gone again.

Chandler was a concubine not even that; he was a male geisha, convenient to play gin rummy with, or for company on the surfboards, or to make a drink.

He did not quite know what to make of himself. In bad times one hopes for survival. He had hoped; and now he had survival, perfumed and cushioned, but on what mad terms! Rosale was a pretty gitl, and a good-humored one. She was right. There were worse things in the world than being her companion; but Chandle rould not adjust himself to the role.

It anserred him when she cot

It angrees nam when see got up from the garden swing and locked herself in her room — for he knew that she was not sleeping as she lay three, though her eyes were closed and she was motionless. As all the short of the short of the same askings to be short to stop him when his hands presumed. And it drow him nearly wild to be a pupper with the strings.

exec who wished to communicate with another cast about for an available human proxy nearby. Chandler was that for Rosie Pan: her telephone, her social secretary, and on coassion he was the garment her dates put on. For Rosaile was one of the few exec who cared to conduct any major part of her life in her own skin. She liked dancing, She enpheasure to dispiley herrelf to the working the secretary of the conpleasure to dispiley herrelf to the working-pers at Luigi the Wharf Ran's and to speed down the lone. combers on a surfboard. When another exec chose to accompany her it was Chandler's body which gave the remote "date" flesh

He ate very well indeed - in surprising variety. He drank heavily sometimes and abstained others Once in the person of a Moroccan exec he smoked an opium pipe; once he dined on

roasted nuppy. He saw many interesting things and, when Rosalie was occupied without him he had the run of her house, her music library, her pantry and her books. He was not mistreated. He was nampered and praised, and every night she kissed him before she retired to her own room with the snap-lock on the door. He was miserable.

He prowled the house in the nights after she had left him, unable to sleep. It had been bad enough on Hilo, under the hanging threat of death. But then, though he was only a slave, he was working at something that used his skill and training.

Now? Now a Pekingese could do nearly all she wanted of him He despised in himself the knowledge that with a Pekingese's cunning he was contriving to make himself indispensable to her-her slippers fetched in his teeth, his silky mane by her hand to stroke - if not these things in actuality, then their very near equivalents.

But what else was there for him?

> There was nothing. She had spared his life from Koitska, and if he offended her Knitska's sentence would be carried out.

Even dying might be better than this he thought. Indeed, it might be better even

to go back to Honolulu and life.

In THE morning he woke to wide, carpeted steps to her room. She was not asleep; it was her mind that was guiding him.

He opened the door. She lay with a feathery coverlet pulled up to her chin, eyes open, head propped on three pillows: as she looked at him he was free. "Something the matter, love? You fell asleep sitting up."

"Sorry." She would not be put off. She made him tell her his resentments. She was very understanding and very sure as she said, "You're not a dog, love, I won't have you thinking that way. You're my friend. Don't you think I need a friend?" She leaned forward. Her nighteown was very sheer; but Chandler had tasted that trap before and he averted his eyes, "You think it's all fun for us. I understand. Tell me, if you thought I was doing important work - oh. crucial work, love - would you

feel a little easier? Because I am.

We've got the whole work of the island to do, and I do my share. We've got our plans to make and our future to provide for. There are so few of us. A single H-bomb could kill us all. Do you think it isn't work, keeping that bomb from ever coming here? There's all Honolulu to monitor, for they know about

here? There's all Honolulu to monitor, for they know about us there. We can't like some disgusting nitwits like your Society of Slaves destroy us. There's the problems of the world to see to. Why," she said with pride, "we've solved the whole Indian-Pakistani population problem in the last two months. They'll not have to worry about famine again for a dozen generations! We're working on China now; next Japan; next - oh, all the world. We'll have three-quarters of the lumps gone soon, and the rest will have space to breathe in. It's work!"

She saw his expression and said carnestly, "No, don't thin that You call it murder. It is, of course. But it is the surgeon's hinter where you can be the same and the same an

Then she shook her head.
"Never mind," she said — apparently to herself. "Forget it, love. Go like an angel and fetch us both some coffee."

LIKE AN angel he went . . .

She was keeping something from him, and he was too stub-born to let her tease him out of his mood. "Everything's a secret." he complained, and she patted his cheek.

"It has to be that way." She

was quite serious. "This is the biggest thing in the world. I'm fond of you, love, but I can't let that interfere with my duty." "Shto, Rosie?" said Chandler's

mouth thickly.

"Oh, there you are, Andrei,"
she said, and spoke quickly in
Russian.

Chandler's brows knotted in a scowl and he barked: "Nyeh mozhet bit!"

"Andrei . ." she said gently.
"Ya vas sprashnivayoo . ."
"Nyet!"

"No Andrei . . . "

Rumble, grumble; Chandler's body twitched and fumed. Heard his own name in the argument, but what the subject matter was he could not tell. Rosalie was coaxing; Koitska was refusing. But he was weakening. After minutes Chandler's shoulders shrugged; he nodded; and he was free.

"Have some more coffee, love," said Rosalie Pan with an air of triumph. Chandler waited. He did not

understand what was going on.
It was up to her to enlighten
him, and finally she smiled and
said: "Perhaps you can join us,
love. Don't say yes or no. It isn't
up to you . . . and besides you
can't know whether you want it
or not until you try. So be patient a moment."

Chandler frowned; then felt his body taken. His lips barked: "Khorashaw!" His body got up and walked to the will of Rosslie's room. A picture on the wall moved aside and there was aste. Flick, flick, Chandler's own fingers disled a combination so rapidly that he could not follow

rapidly that he could not tology it. The door of the safe opened. And Chandler was free, and Rosalie excitedly leaping out of the bed behind him, careless of the wisp of nylon that was her only garment, crowding softly, warmly past him to reach inside the safe. She lifted out a coronet very like her own.

She paused and looked at

Chandler.
"You can't do anything to harm us with this one, love," she warned. "Do you understand that? I mean, don't get the idea that you can tell anyone any-

thing. Or do something violent. You can't. I'll be right with you, and Koitska will be monitoring the transmitter." She handed him the coronet. "Now, when you see something interesting, you move right in. You'll see how. It's the

easiest thing in the world, and — Oh, here. Put it on." Chandler swallowed with difficulty.

Chandler stood motionless for a moment and then, without effort, floated free of his own body.

PLOATING. Floating: a jelly-fish floating. Trailing tentacles that whipped and curled, floating over the sandbound claws and chitin that clashed beneath, floating over the world's people, and them not even knowing, not even seeing.

Chandler floated.

He was up, out and away. He

was drifting. Around him was no-color. He saw nothing of space or size, he only saw, or did not see but felt-smelled-tasted, peonie. They were the sandhound They were the creatures that crawled and struggled below, and his tentacles lashed out at them

Beside him floated another The girl? It had a shape, but not a human shape — a pair of great projecting spheres, a cinctured area-rule shape. Female. Yes, unmember at him and he understood he was beckoned. He fol-

lowed. Two of sandbound ones were

aboad. The female shape slipped into one, he into the other. It was as easy to invest this form with his own will as it was to command the muscles of his hand. They looked at each other out of sandbound eyes. "You're a boy!" Chandler laughed. The girl laughed: "You're an old washerwoman!" They were in a kitchen where fish simmered on an electric stove. The boy-Rosie wrinkled his-her nose, blinked and was empty. Only the small almond-eved boy was left, and he began to cry convulsively Chandler understood. He floated

This way, this way, she gestured. A crowd of mudbound figures. She slipped into one, he into another. They were in a bus now, rocking along an inland road, all men, all roughly dressed. Laborers going to clear a new

out after her.

section of Oahu of its split-level debris. Chandler thought, and looked for the girl in one of the men's eyes could not find her. hesitated and - floated. She was hovering impatiently. This way!

He followed and followed They were a hundred people

doing a hundred things. They lingered a few moments as a teen-age couple holding hands in the twilight of the beach. They fled from a room where Chandler was an old woman dving on a bed, and Rosalie a stolid, uncaring nurse beside her. They played follow-the-leader through the audience of a Honolulu movie theater, and sought each other. laughing, among the fish stalls of King Street. Then Chandler turned to Rosalie to speak and

... it all went out ... the scene disappeared . . . he opened his eyes, and he was back in his own flesh. He was lying on the pastel pile

rug in Rosalie's bedroom. He got up, rubbing the side of his face. He had tumbled, it seemed. Rosalie was lying on the had

In a moment she opened her eyes

"Well love?" He said hoarsely, "What made it stop?"

She shrugged "Koitska turned you off. Tired of monitoring us, I expect - it's been an hour I'm surprised his patience lasted this long."

She stretched luxuriously, but he was too full of what had happened even to see the white grace of her body. "Did you like it, love? Would you like to have it forever?"

XIII

FOR NINE days Chandler's ratus remained in limbs. He spent that day in a state of numb bemusenest, remembering the bemusenest, remembering the bemusenest, remembering the like garments, appalled and exhibitated. He did not see Rosalie again that day, she kept to her room and he locked out. He was still a lapdog, but a lapdog with a dram dangling before him. He went to sleep that night thinking, come a good, and he had cliebt.

The next day Rosalie wheedled another hour of the coronet from Koitska. They explored the ice caves on Mount Rainier in the bodies of two eick, starving, hermits and wandered arm in arm near the destroyed International Bridge at Niagara, breath-

arm near the destroyed international Bridge at Niagara, breathing the spray of the unchanging Falls. He had seven days left. They passed like a dream. He saw a great deal of the inner workings of the exec, more than before. He had privilezes. He was up for membership in the club. Rosalie had proposed him. He talked with two Czechoslovakian ballet dancers in their persons, and a succession of heavily accented Russians and Poles and Japanese through the mouth of the beach boy who came to tend Rosalie's garden. He thought they liked him and was pleased that he penetrated where he had

Rosalie's garden. He thought they liked him and was pleased that he penetrated where he had not been allowed before . . . until he realized that these freedoms were in themselves a threat. They allowed him this contact so that they could look him over. If they rejected him they would have to kill him, because he had seen too much. But by then a week had passed, and another day, and though he did not know it he had only one day left. Possile did what she could to make the days of waiting easy for him

"Embarrassing isn't it? I went through it myself, love. Come have a drink." "When will I know?" he de-

manded fretfully.
"Well." She hesitated. "I don't

ing you, love, under the circumstances —"

He knew what the circum-

He knew what the circumstances were.
"I guess I can tell you. You need just over seven hundred

votes to come in. You've got -"
Her eyes glazed for a moment.

days left.



She was looking through some clerk's eyes, somewhere on the island. "You've got about a hundred and fifty so far. Takes time, doesn't it? But it's worth it in

the end."

"How many 'no' votes?"

'None." She said gently, "You'll never have but one, love, because

that's all it takes."

He stared. The girl gook took up his hand and kissed it lightly. "One blackball's enough, yes, but never fear. Rosie's on your side."

RESTLESSLY Chandler stood up and made himself another drink. His head was beginning to buzz. They had been drinking on her sun terrace since early afternoon.

Rosalis came up beside him

Rosalie came up beside him soothingly. "I know how you feel. Want me to tell you about when I went through it?"

"Sure," he said, stirring the ice around in the glass and drinking it down. He made another drink absently, hardly hearing what she said, although the sound of her voice was welcome.

"Oh, that lousy headdress! It weighed twenty pounds, and they put it on with hatpins." He caressed her absently. He had figured out that she was talking about the night New York was bombed. "I was in the middle of the big first-act curtain number when —" her face was strained,

even after years, even now that she was herself one of the godlike ones — "when something took hold of me. I ran off the stage and right out through the front door. There was a cab waiting. As soon as I got in I was free, and the driver took off like a lunatic through the tunnel, out

to Newark Airport, I tell you, I was scared! At the toll booth I screamed but my—friend—let go of the driver for a minute smashed a trailer-truck into a police car, and in the confusion we got away. He took me over again at the airport. I ran bare as a bird into a plane that was under control. We flew eleven boust, and I wore that

damn feather headdress all the way." She held out her glass for a re-

Chandler pulled her down on

the couch beside him and made a toast, "Your friend."

"He's a nice guy," she said moodily, sipping her drink, "You know how careful I am about getting exercise and so on? It's partly because of him. You

would have liked him, love, only - well, it turned out that he liked me well enough, but he began to like what he could get through the coronet a lot more. He got fat. A lot of them are awfully fat, love," she said seriously. "That's why they need people like me. And you. Replacements. Heart trouble, liver trouble, what can they expect when they lie in bed day in and day out, taking their lives through other people's bodies? I won't let myself go that way . . . It's a temptation. You know almost every day I find some poor woman on a diet and spend a solid hour eating creampuffs and gravies. How they must hate me!

She gripped, leaned back and kissed him.

Chandler but his arms around the girl and returned the kiss hard. She did not draw away. She clung to him, and he could feel in the warmth of her body, the sound of her breath that she was responding. The drink made him reckless: the last two weeks made him doubtfult he was torn. He could tell that there was no

resistance in her body, but the coronet made it in doubt: she could fling him away from her with one touch of the mind. Vet she didn't do it -

"Vi myenya zvalip" his own voice demanded, harsh and mocking.

TPHE GIRL tried to push him away. Her eyes were bright and huge, staring at him

"Andreit" "Da. Andreil Kok eto dosad-

"Andrei, please, I know that you are -"

"Filthy!" screamed Chandler's voice, "How can you? I do not allow this carrion to touch you so - not yot is mine -- I do not allow him to live!" And Chandler dropped her and leaped to his feet. He fought, He struggled; but only in his mind, and help-Jessly his hody carried him out of the room, running and stumbling, out into the drive, into her

He drove like a madman on roads he had never seen before. The car's gears bellowed pain at their abuse, the tires screamed.

waiting car and away.

Chandler, prisoned inside him-self, recognized that touch. Koitska! He knew who Rosalie Pan's lover had been. If he had been in doubt his own voice, raucous and hysterical with rage, told him the truth. All that long drive it screamed threats and obscenities at him, in Russian and tortured English.

The car stopped in front of the TWA facility and, still prisoned, his body hurried in, bruising itself deliberately against every doorpost and stick of furniture. "I could have smashed you in the car!" his voice screamed hoarsely. "It is too merciful I could have

thrown you into the sea! It is not painful enough," In the garage his body stopped and looked wildly torches." "Knives his line chanted "Shall I gouge out

eves? Slit throat?"

A jar of battery acid stood on shelf, "Do, do!" screamed Chandler, stumbling toward it. "One drink eh? And I von't even stay vith you to feel it, the pain - just a moment - then it eats the gut, the long slow dying . . ."

And all the time the body that was Chandler's was clawing the cap off the jar, tilting it -He dropped the jar, and leaped aside instinctively as it splintered at his feet.

He was free! Before he could move he was seized again, stumbled, crashed into a mall -

And was free again. He stood waiting for a moment unable to believe it: but he was still free. The alien inchair, with a back of solid carved yader did not saire his mind

There was no sound. No one moved. No gun fired at him, no danger threatened. He was free; he took a step,

turned shook his head and proved it. He was free and, in a moment, realized that he was in the build-

ing with the fat bloated body of the man who wanted to murder him, the body that in its own strength could scarcely stand erect

It was suicide to attempt to harm an exec. He would certainly lose his life - except - that was gone already anyhow; he had lost it. He had nothing left to lose.

XIV

C'HANDLER loped silently up the stairs to Knitska's suite

Halfway up he tripped and sprawled, half stunning himself against the stair rail. It had not been his own clumsiness, he was sure Koitska had caught at his mind again, but only feebly, Chandler did not wait. Whatever was interfering with Koitska's control, some distraction or malfunction of the coronet or what-

ever. Chandler could not bank on its lasting. The door was locked.

He found a heavy mahogany wood. He flung it onto his shoulders, grunting, and ran with it into the door, a bull driven frantic, lunging out of its querencia to batter the wall of the arena. The door splintered.

The door splintered.

Chandler was gashed with long slivers of wood, but he was

through the door.

Koitska lay sprawled along his couch, eyes staring.

Alive or dead? Chandler did not wait to find out but sprang at him hands outstreched. The staring eyes dickered; Chandler felt the pull at his mind. But Koitska's strength was almost gone. The eyes glazed, and Chandler was upon him. Eripped the coronet off and flung it saids, and the huge bulk of it saids.

Koitska swung paralytically off the couch and fell to the floor. The man was helpless. He lay breathing like a steam engine, one eye pressed shut against the leg of a coffee table, the other

looking up at Chandler, almost chandler was partially almost Chandler was partially almost chandler was partially almost his feet. He was belief as a set of the feet of the chandler was partially almost for a say time one of the other excess might dart down out of the mind-world into the real, looking at the scene through Chandler's eyes and surely deducing what would be no more to his fawor than the truth. He had to get away from there. If he seemed boars in another come neckage was a feet of the chandler's and the seemed boars in another come neckage.

they would go away again.

Chandler turned his back on the
paralyzed monster to flee. It
would be even better to try to
lose himself in Honolulu — if he
could get that far — he ddi not
in his own flesh know how to fly
the helicopter that was parked in
the yard or he would try to get
farther still.

But see he turned he was

CHANDLER turned to see

screamed.

His eyes were staring at Koitska. It was too late. He was possessed by someone, he did not
know whom. Though it made
little enough difference, he
thought, watching his own hands
reach out to touch the staring

His body straightened, his eyes looked around the room, he went to the deak. "Love," he cried to himself, "what's the matter with Koitska? Write, for God's sake!" And he took a pencil in his hand and was free. He hesitated, then scribbled:

I don't know. I think he had a stroke. Who are you?

The other mind slipped tentatively into his, scanning the paper. "Rosie, you idiot, who did you think?" he said furiously. "What have you done?"

Nothing, he began instinctive-

fore

ly, then scratched the word out. Briskly and exactly he wrote: He was going to kill me, but he had some kind of an attack. I took his coronet away. I was go-

ing to run.
"Oh, you fool," he told himself shrilly a moment later. Chandler's body knelt beside the wheezing fat lump, taking its pulse. The faint, fitful throb meant nothing to Chandler; probably meant nothing to Rosie either,

noting to Canadar; processing to meant nothing to Rosie either, for his body stood up, hestisted, shook its head. "You've done it now," he sobbed, and was surprised to find he was weeping real tears. "Oh, love, why? I could have taken care of Koitska — somehow — No, may'be I souldn't, he said frantically, breaking down. "I don't know what to de Do you have any what to de Do you have any

ideas — outside of running?"

It took him several seconds to
write the one word, but it was
really all he could find to write.

No.

His lips twisted as his eyes read the word. "Well," he said practically, "I guess that's the end, love. I mean, I give up."

He got up, turned around the room. "I don't know," he told

He got up, turned around the room. "I don't know," he told bimself worriedly. "There might be a chance — if we could hush this up. I'd better get a doctor. He'll have to use your body, so don't be surprised if there's somen and it in't me. Maybe he

can pull Andrei through. Maybe Andrei'll forgive you then — Or if he dies," Chandler's voice schemed as his eyes stared at the rasping motionless hulk, 'we can say you broke down the door to help him. Only you'll have to put his coronet back on, so it won't look suspicious. Besides that will keep anyone from occupying him. Do that love. Hurry." And

he was free. Gingerly Chandler crossed the

He did not like to touch the dying animal that wheezed before him, liked even less to give it back the weapon that, if it had only a few moments of sentience again, it would use to kill him. But the girl was right. Without the helmet any wandering curihimself. The helmet would shield him from—

Would shield anyone from — Would shield Chandler himself from possession if he used it!

He did not hesitate. He slipped the helmet on his head, snapped the switch and in a moment stood free of his own body, in the gray, luminous limbo, looking down at the pallid traceries that lay beneath.

HE DID NOT hesitate then either. He did not pause to think or plan; it was as though he had planned every step, in long detail.

86 GALAXY

over many years. Chandler for at least a few moments had the freedom to battle the execs on their own ground, the freedom that any mourning parent or husband in the outside world would know well how to use.

Chandler also knew. He was a weapon. He might die — but it was not a great thing to die, millions had done it for nothing under the rule of the exces, and he was privileged to be able to die trying to kill them.

He stepped callously around the hulk on the floor and found a door behind the couch, a door and a hall, and at the end of that hall a large room that had once perhaps been a message center. Now it held rack after rack of electronic gear. He recopized it without elation. It had had to be there.

It was the main transmitter for all the coronets of the exec. He had only to pull one switch - that one there - and power would cease to flow. The coronets would be dead. The execs would be only humans. In five minutes he could destroy enough parts so that it would be at least a week's work to build it again. and in a week the slaves in Honolulu - somehow he could reach them, somehow he would tell them of their chance - could root out and destroy every exec on all the islands.

Of course, there was the standby transmitter he himself had helped to build. He realized tardily that Koit-

ska would have made some arrangement for starting that up by remote control.

He put down the tool-kit with which he had been advancing on the racks of transistors, and paused to think.

paused to think.

He was a fool, he saw after a moment. He could not destroy this installation — not yet — not until he had used it. He remembered to sit down so that his body would not crash to the floor, and then he sent himself

out and up, to scan the nearby

area.

There was no one there, no-body within a mile or more, exexpt the feeble glimmer that was
dying Koitska. He did not enter
that body. He returned to his
own long enough to barricade the
door — it had a strong-looking
lock, but he shouldered furniture
against it too — and then he
Rosaile, who had taught him how
to navieate in the curious world
to navieate in the curious world

of the mind, flashing across water, under a mind-controlled plane, to the island of Hilo. There had to be someone near the stand-by installation.

the stand-by installation.

He searched; but there was no one. No one in the building. No one near the ruined field. No one

in the village of the dead nearby. He was desperate; be became frantic; he was on the point of giving up, and then he found someone? But it was a personality feebler than stricken Koitity feebler than stricken Koit-

ska's, a bare swampfire glow. No matter. He entered it.

A TONCE he screamed silently and left it again. He had never known such pain. A terrifying fire in the belly, a thunder past any migraine in the head, a thousand lesser aches and woes in every member. He could not imagine what person lived in such distress: but or firmly he forced

Moaning - it was astonishing

how thick and animal-like the

men's voice was - Chandler

himself to enter again.

forced his borrowed body stumbling through the jungle. Time was growing very short. He drove it gasping at an awkward run across the airfield, dodged around one wrecked plane and blundered through the door. The pain was intolerable. He was hardly able to maintain control.

Chandler stretched out the borrowed hand to pick up a heavy wrench even while he thought. But the hand would not grasp. He brought it to the weak, watering eyes. The hand had no fingers. It ended in a ball of scar tissue. The left hand was nearly as misshapen.

Panicked, Chandler retreated

by. from the body in a flash, back to me his own; and then he began to of think.

It was, it had to be, the creature he had seen in the village of the dead A lener One of the few who escaped from the colony at Molokai, Chandler drove himself back to that body and though it could not work well, he could make it turn a frequency dial. using its clubbed hands like sticks. He could make it throw a switch. He then caused it to place the toothed edge of a rusting saw on the ground and strike at it with its throat in a sort of reverse guillotine. Chandler could not see that he had a choice; he dared not have that creature left where it might be seized the moment he

quit its body. It was better dead.
After that it all became easy.
In his own body he destroyed
the installation in Oahu. A few
minutes at Kotiska's work bench,
and he had changed the frequency on his own coronet to transmit
on the new band the leper's touch
had given the Hilo equipment.
He worked randidy and with-

out errors, one ear cocked for the sound of someone coming to threaten what he was doing (the sound never came), impatient to get the job done. He was very impatient, for

He was very impatient, for when he was done he would be the only exec.

And the execs would be only

slaves.

CHANDLER strolled out of the TWA building, very tired. It was dawn. His job was done. He carried the coronet, the only working coronet in the world, in his hand. He had spent the night killing, killing, killing, and blood had washed away his passions; he was spent. He had killed every exec he could find, in widening circles from the building where his body lay. He had slit his dozen throate and fired bullete into his hundred bearts and hundred brains; he had entered bodies only long enough to feel for a coronet, and if it was there the body was doomed; and he stopped only when it occurred to

stopped only when it occurred to him he wasn't even doing that much any more. He had probably killed some dozens of slaves, as well as all the exces in reach. And when he stopped the orgy of killing he had made one last search of the nearer portions also that had been to the same alive, and he had then realized that one of the closest exces had been Rossile Pan. He knew that in a while he

He knew that in a while he would feel very badly for having killed that girl (which could she have been? The one with the shotgun in the mouth? The one whose intestines he had spilled with a silver letteropener in a whim of hara-kirl?), but just now he was to worth.

He was Chandler the giant killer, who had destroyed the creatures who had destroyed as world, but he was all tiped out. He poked at the filigree of the coronet absently, as a man might caress the pretty rug which once had been the skin of a tiger that almost killed him. It was all that was left of the exce power. Who held this single coronet still held the world.

Of course, said a sly and treasonable voice in a corner of his mind, the job was not really done. Not outs. Not all.

The job would not be done until it was impossible for anyone to find enough of the installations to be able to reconstruct them.

And then, said the voice, while

Chandler stared at the dawn, listening, what about the good things the exec had done? Would he not be foolish to throw away so casually this one, unique chance to right every imaginable wrong the world might do him?

Chandler went back into the building and brewed some atrong black coffee. While it was bubbling on the store he slipped the coronet back atop his head. Only for a while, he pledged himself solemnly that it would be just long southern the solemnly that it would be just long southern though the pledged. And knew that he was pledged. And knew that he was pledged. And knew that he was the solemnly that the th



N ASSUMPTION can seem like fact merely by constant repetition. That this is startlingly true has been demonstrated by Isaac Asimov in his latest book, the title of which supplies the finest three-word description of science fiction that I have yet seen and just barely lacks the snappy comph that would entice a prospective mag publisher to sobble it up as the title of a new SF entry. Fact and Fancy by Asimov. under Doubleday's imprint, is a collection of speculative essays.

mainly from FASF, that repre-sent is closest approach to sent his closest approach to fictional sphere since he took up as science popularization in early had keen enjoyment from taking certain stock assumptions from the repertories of the SF hack write subjecting them to keen scrutiny under the pittless light of present scientific knowledge. For example, one of the most

glamorous settings used for years has been, "The Planet of the Double Sun." How many stories have you and I read with this background? Now along comes Spoilsport Asimov and proceeds to knock this exotic picture out of our heads with hard facts. He takes as example Alpha Centauri A, which is Earth's twin in temperature, brightness and mass, and which actually is the major partner in an existing binary year. Alpha Centauri B, the minor partner, revolves in the orbit of Uzanus, two billion miles out, so

tem. In terms of our solar system, Alpha Centauri B, the minor partner, revolves in the orbit of Uranus, two billion miles out, so that even Saturn would be near-to A than to B. And since A has eight times the gravitational attraction of B, no trouble should attractive the should be near the orbit of the should be near the should be not should be not

But would B appear like another sun? It would not! Asimov does the grithmetic and finds that a diameter of 430,000 miles at a distance of two billion miles subtends an angle of 45 seconds of orc. To the noked eye. Sun B would be just about the apparent size of Jupiter! The one small feature redeemed from this rude shattering of one of my favorite boyhood illusions is the fact that Sun B would be 150 times as bright as the full moon. But this is still only 1/3000th as bright as Sun A. O. How close would a star the

Q. How close would a star the size of our sun have to be to be seen as a disk? A. Not more than a billion miles. Considering that, even at the center of our galaxy, star distances average one light year, the possibility of double sun systems of dear memory is very dim indeed.

Incidentally, how big is the apparent size of the moon as seen from the earth's surface? This has been tossed into many stories also. The usual answer is given linearly and is therefore meaningless. Astonishingly, a quarter dollar, which the mind conceives of as quite small, but overtunes of nine feet, will just overtunes of nine feet, will just overtune of nine feet, will just overtune of the feet of the property of Bangal Another punctured illulange for which is quite large.

eion!

Another startling demonstration of the tricks our senses play on us is the actual count of evevisible stars in the iampacked firmament of a perfect night in the mountains. "Millions! Billions!" shouts Averageman, ignorent of the fact that there are only 3,000 stars in both hemispheres of magnitude 6.5 or brighter, the faintest star that can be detected with the unaided eye. Getting back to the moon, if at any particular time it were to be removed from the sky, how many visible stars would it have been obscuring? The odds are 33 to 1 that removal would reveal not one star behind it!

The next secred cow slaughteved by Asimov's mercliese pen is the "familiar constellations" bits of smilliar in space operss of yore, including, I'll bet a ninefoct quarter, Dr. Asimov's own. In deep space, our astronauts will view over two and one half times as many naked-eys stars due to the elimination of atmospheric absorption of 30% of starlight. All fine details of the "familiar All fine details of the "familiar out by the light of thousands of additional stars.

In another chapter touchingly titled "The Sight of Home." Asimov calculates the maximum distance at which our future astronauts can lift their "tear-filled homesick eyes to the alien heavens for a glimpse of home." This works out to sixty-five light years at the absolute threshhold of naked-eve visibility. In fact, the Alpha Centauri system, our closest neighbor in space, is the only one from which Sol can be seen as a first magnitude star Thus, Sol can be seen at all from an absolute maximum of 1450 near-by star systems. A lot, but certainly a tiny handful in com-

parison with our galaxy's total population of a hundred billion stars.

Further speculation then leads Asimov to wonder just how bright our sun would have to be to be seen at increasingly greater distances. Sirius, far brighter than Sol, can be seen at a maximum distance of 325 light years and Capella 850 light years. Of the stars visible from Earth, though, the championship is held by Rigel, over 20,000 times as luminous as Sol. Rigel can be seen over a range of one-fifth the width of the galactic lens, more than 9,000 light years in any direction. Asimov's tear-filled Astronaut could say, "Oh, well, you can't see our Sun from here. but it's pretty close to Rigel, that star over there, the one you call BifxInt."

As can be gathered from the above, good Dr. Asimov has let down his hair as he has never done in his other books aimed at a more general audience. He is among his own science-fictional friends and his free-wheeling low is apparent.

In another chapter that his close to the home of most of us in this field, he attempts to answer the question invariably put to him (and all other creators of SP or fantasy fiction): "When the control of the control

I can think of no one better supplied with such an assortment

Darwin's

of numerous and amazing facts, nor one better qualified to leap lightly over the enchanted threshold dividing Fact from Fancy as the author of these seventeen "speculative essays".

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authors for years, Aslmov,
Arthur C. Clarke, Chan Davis,

Arthur C. Clarke, Chan Davis, Chad Oliver, the late Miles J. Breuer. Still others, when shorn of their literary pseudonyms, are names of prestige in their particular fields; John R. Pierce, Willy Ley, R. S. Richardson, the late Eric Temple Bell.

The most interesting thing

The most interesting thing about the scientists in this collection who are one-shot SF authors is that they all have one point in common; none of their stories are exalted flights of fanty. They have all resorted to the fictional approach to make some sharply pointed moral or ethical commentary on the abuse of knowledge.

The little playlet, Pilot Lights of the Apocalypse, by the noted nuclear physicist, the late Louis N. Ridenour, published only six months after Hiroshima, is one of the earliest and one of the most effective warnings against the possibility of push-button

warfare that I've ever read.
Both J.B.S. Haldane's The
Gold-Makers and Julian Huxley's The Tissue-Culture King
are chase thrillers in which important discoveries are prostituted to selfish ends. The Ultimate Catalyst by Eric Temple
Bell (John Taine) is also, but
it is an unashamedly commercial

piece from the Thirties.

The stories by the pros (Clarke, Asimov, Davis, Oliver) are polished jobs that are fairrepresentative but unexceptional. In fact, What If . . . by Isaac Asimov is more a piece of whimsical fantasy concerning alternate pasts than it is straight SF. Not so with John Sze's Future, a previously unpublished story by "J. J. Coupling" who is John R. Pierce, Bell Telephone's Director of Research for Communications Principles. It is a wry little varn about a nuclear physicist, convinced of the power of psi over matter, dredged by unhappy mistake from the twentieth century by a psychologically orientated future in which physical scientists are regarded with an aversion usually reserved for mad dogs. He remains oblivious to the true nature of the scientific advances attributing them to psi-There is a semantic mixup concerning psi and psy, and the future that his delighted preconceptions lead him to see is far removed from the drab and prosaic reality.

The author of Learning Theory. James McConnell, is a research psychologist. In his story, he rips to shreds one of the most sacred tools of his profession. the teaching and testing of lower animals by rewards and/or punishment. In his remarkably uncomfortable varn that builds toward a high peak of frustration, he smashes the Learning Theory by casting his hero, himself a psychologist, in the role of the impotent lower enimal under test.

Conklin has come up with an engrossing "idea" anthology. Rating: ****1/2 NAKED TO THE STARS by

Gordon R. Dickson. Pyramid Books "DORSAI!" by Dickson was a cracking good war story. So is Naked to the Stars. Cal Truent, combat lieutenant, rather than discover what happened during sixteen hours of amnesia during combat, resigns from active duty and enlists in the detested Contact Service, a

maneuver that creates doubts concerning his courage. Contact Service a branch of

Earth's fighting Combat Service, is noncombatant and more theoretically than actually, is responsible for initial (and preferably peaceful) alien contact. Dickson makes his reader ab-

sorbedly aware that service in an organization dedicated to peace can require far more courage than mere combat. THE SUPER RAPRARIANS

Rating: ****

gulfed the victors.

by John Brunner, Ace Books, BRIINNER'S SUPER-BARRA DIANS or were the foutcenth century crusaders of Poul Anderson's delightfully tongue-in-cheek The High Crusade, are conquerors because of their employment of captured ships and weapons that are far beyond their true technological capabilities Brunner's tale however is not a swashbuckler. He picks up the parrative thread some fifty years after Earth's defeat by the Vorrish and draws a picture of conqueror and conquered that is deliberately reminiscent of the roles of Roman conqueror and Greek slave of millenia past, or the Mongols and the superior civilization of the Chinese that ultimately en-

Rating: *** - FLOYD C. GALE

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